INVESTMENT AND SPECULATION

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INVESTMENT AND SPECULATION

CHAPTER I

NATURE OF INVESTMENT AND SPECULATION

Investment and speculation are closely associated with each other and with the well-being of trade. They are the propelling forces governing the money market, which in turn is the vital life-blood of business.

Every head of a corporation, every business man who holds a responsible position and upon whose judgment the success of an enterprise largely depends, should provide himself with a general knowledge of the problem of investment and speculation.

Many a merchant and many a manufacturer who has mastered the problem of investment and speculation has been able to put his knowledge to great financial advantage. Through his ability to foresee a drain upon the money market and its consequent effect upon interest rates, he can provide for all his banking accommodations long before interest rates have hardened. He has been able, by anticipating a depression in trade, to curtail expenditures and guard his credit accounts from weakness. Such a knowledge prevents him from being caught off his guard by a sudden dropping-off in business. And, vice versa, he is in a position to detect a revival in trade by the same barometer, the money market.

As it is also true that business, whatever may be its nature, is a calling devoted solely to the making of profits,

some time or other surplus funds are accumulated which are intended for investment. The intelligent and safe investment of such idle funds requires a general knowledge of investment and speculation. Fortified with such knowledge, the owner of surplus funds guards himself from serious errors. It shows him the importance of being guided by actual facts and not by the hearsay advice of others. It can harm no one to know how to differentiate between investment and speculation; it can only benefit him.

Definitions

Defining the difference between investment and speculation is not easy, as there are no hard and fast rules to distinguish them. The dictionaries commonly define investment as follows: "To lay out capital in the purchase of property for permanent use as opposed to speculation." And then they say that speculation is "to make a purchase or investment that involves risk in the hope of probable gain," "a more or less risky investment of money in expectation of considerable gain."

It is plain that in each case the word means the employment of capital for gain. Broadly speaking, there is no distinction between the two methods of laying out capital beyond that made in the public mind by the measure of risk involved. Now experience shows that the measure of risk in any given case may vary from day to day, so that what seemed free from all danger yesterday may present all the elements of hazard tomorrow.

Illustrated by Government Bonds

This may appear rather a strange statement, but a simple example will easily establish it. There is no safer investment in the mind of the public than a government

bond, but suppose a government conquered and its possessions invaded by the forces of a foreign foe; what is the natural outcome of such a disaster? The securities issued by the stricken nation rapidly decline in value, through the general uncertainty as to how the invaders will deal with the nation's creditors. They can, if they so desire, wipe the slate clean of all debts, or they can compromise, or they can pay in full. As long as it is not known what the outcome will be, the quotations of all the nation's obligations fluctuate violently. As securities, in regard to the safety of the funds invested in them, they cannot properly be classified as investments.

Of course such a turn of affairs with us is an unlikely contingency. I mention it as a remote possibility, merely to emphasize my statement that there are really no immutable rules that will make an investment always an investment. Unforeseen events will often transform an investment into a speculation or change what at one time appeared a risky speculation into a very desirable investment.

It was not very long ago, measured in years, that our government bonds were looked upon by foreign investors more or less as a speculation. This was during the dark days of our Civil War, when Gladstone, the British Premier, seemed to speak the truth when he declared that a new nation was born by the secession of the southern states from the United States of America. The bonds then issued by our government to raise money to carry on the war were viewed with suspicion in England. Only the German and French investors took kindly to our securities and then only when they were obtainable at bargain-counter terms.

Nor does a clash in arms between nations alone tend to have a serious effect upon their securities. It sometimes

happens that economic influences depress their values to such a degree as to make them a poor investment for those who placed their money in them when they were regarded as gilt-edged securities and were bringing high prices. This is what has happened with British consols, the government obligations of the English nation. They have steadily declined in price until under the normal conditions prevailing before the great European war they were selling as low as seventy. I shall not enter here into a discussion of the causes responsible for this striking decline in one of the premier securities of the entire world. I cite it only as another illustration in support of my contention that the dividing line between investment and speculation is very elastic.

What may be good today may be worth much less tomorrow or may be even worthless.

Illustrated by Mortgages

A mortgage upon a building or a parcel of land may be at the time a very desirable investment, but an upheaval of nature's forces may occur on the spot where the pledged land is located and destroy all the value in less time than it takes to write this paragraph. Did this not happen in Pompeii? Can it not happen again? The ashes of Vesuvius in a few hours swept into total destruction all the capital permanently laid out in homes and in other structures of the doomed city. Only a few years ago an earthquake attacked Messina and, while the city was not completely destroyed, the catastrophe did irretrievable harm to capital permanently invested in property. And that capital, in the light of subsequent events, could not be properly classified as being invested, since it was at all times subjected to extraordinary risks

—risks such as are grouped under the term "speculation."

Men make values, but they merely assist in making conditions. As long as values are thus made, uncertainty, naturally, will surround them. If the human race preferred stones as money, gold would immediately decrease in value, its only uses being in the industrial arts. Gold is valuable because it is accepted as a common and standard medium of exchange. Anyone will take it in return for some commodity or article he wishes to sell. It is the distinction mankind makes between the degrees of security which defines the division between investment and speculation.

It is popularly supposed that a bond or a mortgage is an investment because some physical property is pledged to secure it. However, this is not always the case. The property securing a bond may be as valuable as it is represented to be for the purposes for which it is pledged, but, should it be employed for other uses, it might not realize anything like the sum represented by the bond. So also with a mortgage.

There are bridges on some of our principal railroad systems that were built with the money raised from the sale of bonds. As long as the railroads use these bridges and pay rental for their use, these bridge bonds are desirable investments, but should the railroads abandon them, whence would the interest for the bonds come? The property, as old iron and steel, would never realize the capital invested in it. So with a mortgage on a water-power plant: if the water supply should be exhausted there would be no need for the power plant and its machinery, and the essential security which had made the mortgage a good investment would pass with the passing of the water.

The Element of Risk

Investment of money is, therefore, wholly a problem of human judgment, so far as safeguarding it against extreme risks is concerned. It is taken for granted from the very beginning that speculation involves taking large chances for extraordinary gains. Speculation consists in forecasting changes of value, and buying or selling in order to take advantage of them. It may be wholly legitimate, or pure gambling, or something partaking of the qualities of both. Mr. Pratt, in *The Work of Wall Street*, says: "Speculation is an investment of money in which large risk is taken in expectation of great gain." I have already tried to show that there is an element of risk in most investments. In Mr. Pratt's definition the emphasis is laid on the largeness of the risk, which alone distinguishes a speculation from an investment.

TEST QUESTIONS

1. Why is a knowledge of investment and speculation of great value to the business man?
2. What is the distinction between investment and speculation?
3. What conditions cause the amount of risk to vary in different securities?
4. Show what factors will cause government bonds to fluctuate in value.
5. How may a mortgage become a speculation?
6. Why is physical property by itself not an adequate pledge behind a bond? Illustrate.
7. According to Mr. Pratt, what is the determining factor that distinguishes an investment from a speculation?

CHAPTER II

THE INTELLIGENT EMPLOYMENT OF CAPITAL

Ascertainable Risks

Under the circumstances it is best to eliminate from consideration all hazards to investments caused by the caprices of unforeseen forces and conditions which human judgment and foresight are powerless to control. Their interference with the intelligent employment of capital is similar to their effect on the duration of human life. It is as possible for a parent to feel certain beforehand that his new-born offspring will reach the scriptural age of three score and ten as it is for an investor, no matter how careful he is in his selection, positively to assume the safety of the capital he has laid out in a given security.

However, we do know, in determining the length of human life, the average age reached when the simple rules of health are carefully followed and when no fatality, whether accident or disease, intervenes to cut it short. So it is with investments. By observing ordinary precautions they can be safeguarded against every contingency except unknown eventualities.

Distribution of Risks

Large investors even go so far as to protect themselves against unexpected surprises. They diversify their

investments; that is, they distribute their capital among different securities.

The life insurance business is based on a principle somewhat similar. Instead of selecting their risks, life insurance actuaries have successfully worked out a standard mortality table which is wonderfully accurate in determining the average death rate. By means of this mortality table life insurance companies can tell almost to the exact figure, the number of people out of every thousand who will die each year.

Underlying their mortality table is one broad law, which is that each person, before being insured, must be physically free from all traces of disease which can terminate fatally. This is simply the law of averages. Although not recognized very many years, not over seventy-five years at the most, this law has more than justified itself as a reliable measure of safety, and the proof is the enormous assets which the life insurance companies have accumulated. Collectively, their assets mount up into the billions of dollars. They represent the funds that are the bulwarks of protection for outstanding policies representing between ten and fifteen times as much. Fire, marine, and other types of insurance are operated in a similar manner. All their premiums are based on different average tables.

The same principle is now applied, more or less, to investments; that is, our large banks and institutions, with millions in capital at their command, divide their investments among different classes of securities as an insurance against all risk. In this way, financial loss resulting from an unforeseen hazard is so distributed as to cause very little harm, and risk is reduced to a minimum.

Laws based on the theory of averages have been enacted by various states for the protection of savings bank depositors. These laws govern the character of investments in which savings banks are permitted to place their funds. Some states demand of a railroad, before its bonds are acceptable as an investment for savings bank deposits, that it shall have paid dividends on all its outstanding stock uninterruptedly for a certain term of years; others require that only first mortgages on real estate shall be considered desirable and safe investments, and then only up to a certain amount of the property's appraised value. Loans to depositors are also limited. In some states, loans are restricted to not more than 10 per cent of a bank's capital to any one customer of the bank. As a protection against inflation, other states have empowered commissions to supervise the issuance of new securities by corporations. Even cities, towns, and counties are now forced by statutes to keep their bonded obligations within a certain percentage of the assessed value of their taxable property. All these precautionary measures are adopted for the protection of investors and as a check against reckless banking. It must be remembered that bankers must invest their deposits and make loans to pay interest to depositors.

You will often read in the descriptive circular regarding a bond that it is a legal investment for banks in certain states. This means that the corporation issuing the bond has strictly complied with the laws of these states.

The fulfillment of the requirements of some of the states before a bond becomes a legal investment for their chartered banks is regarded by investors as the hallmark of a high-class security, just as the "sterling" mark on silverware is accepted as a sign of its purity.

Diversity of Investments

The foregoing discussion suggests a practical application of the principle of diversity of investments to the needs of the individual investor. As a general rule, conservative investment demands the introduction of the element of diversity. This is true whether the fund is large or small. Investments should be diversified in order to secure safety of principal and income; to get the greatest income compatible with safety; to secure the greatest degree of marketability; and to insure the greatest chance of price appreciation. However good one particular security may be, it cannot satisfy all the legitimate needs of a safe investment.

Intelligent investment demands that it be split up not only into different kinds of securities of the same general type, but into securities of different types. Five thousand dollars invested in first mortgage bonds of five different railway systems may not introduce any real element of diversity into the investment. They are all issues of identically the same type and as investment propositions are likely to respond in the same general way to economic and business conditions. To secure diversity it is desirable to invest, for example, in such a variety of securities as first-class railroad bonds, seasoned public utility bonds, and high-grade industrial bonds. Then if the investor wishes to take a little risk, he may try some reliable preferred or common stock.

A person's own immediate and probable financial demands must be considered in making these investments. If he is likely to be in immediate need of cash, he should invest chiefly in securities that possess a quick market. If on the other hand no immediate needs are in sight, he may choose securities less marketable but

bearing a higher rate of income. One investment factor must be weighed and balanced against another in determining the suitability of an investment for a particular person.

In diversifying an investment, it is important for some people to choose securities on which the interest is payable at different periods of the year. To the well-to-do man it does not make much difference whether his income comes to him in a lump sum or not; but to a great number of investors, it is preferable to scatter as nearly as possible on a monthly basis. This fact is easily accomplished by diversifying investments in such securities as pay their interest at different times of the year.

Degree of Safety

It is simply impossible to estimate accurately what the per cent of losses has been on investments which have proved disastrous. Nevertheless it may be taken for granted that when laid side by side with the enormous volume of capital which has been invested in securities in this country, it comes to but an infinitesimal part of the whole. As the country grows more settled, the per cent of loss will gradually lessen. Such is the characteristic of every nation as it grows older. Take England, for example; also France and Holland; Germany and Austria, only in a less degree. The resources of each of these nations have been so scraped over by capital in its search for opportunities of profitable employment that they no longer offer the investment possibilities they once did. As a result, the majority of their government and municipal obligations, their railroad securities and their land and real estate mortgages, command, during normal periods, in their leading financial market places, a premium which reduces the average income they yield to

about 4 per cent per annum. There is always such a large demand for these securities that they are scarce. Ultra-conservative investors prefer them and are willing to forego a part of the income which is obtainable from securities of lesser safety.

Supply and Demand

Here we may explain briefly a fundamental law governing investments as well as speculations. I refer to the economic law of supply and demand, which is as immutable in influencing the prices of securities as it is in deciding the price of all our leading commodities. Artificial manipulation may stay the operation of this law, but only temporarily; sooner or later it will express itself. The panic of 1907 is a good illustration of the immutability of this law of economics. Security prices had been held up by sheer force for a year previous, against the lessening available supply of capital, only to break at last through the insecure support when all artificial means had exhausted themselves.

It is a natural sequence for investments to rise in price when the demand for them outruns the available supply and to decline when the demand is small and investments glut the market. It is this rising and falling in demand and supply which causes the fluctuation in prices, not only in securities, but in wheat, cotton, hay, barley, oats, and even in the precious metals. Even gold, the accepted standard for coinage among all the principal nations, is subject to the operations of this law. Some of our foremost economists contend that gold in recent years has been mined in such large quantities as to cause the higher cost of living and correspondingly to reduce investors' income.

You will think this a strange theory, but the contention

is logical. The more gold there is, the greater is a people's purchasing power, and as it increases, the demand forces prices up. On the other hand, the income on a secured investment is fixed. A bond or a mortgage may have been purchased some years ago at a price to yield an income of 4 per cent annually, or $40 on each thousand dollars. At the time of the purchase the income may have been attractive. At that time a suit of clothes may have cost only $30, a hat $3, and a pair of shoes, $4. Five years later the same suit of clothes may cost $35, the hat $3.50, and the shoes $5, but the investor holding a 4 per cent bond or a 5 per cent first mortgage derives no greater income, although his purchasing power is considerably reduced.

The peculiar conditions in England, France, and Holland heretofore mentioned are recalled for no other reason than to show that the United States is assuming somewhat the same characteristic. The investors of these countries, for lack of opportunities at home, pour millions of their capital every year into the development of the resources of their colonies and of other countries. While our country is far from exhausting its almost unlimited resources, it has been apparent for some years to keen observers that the wealth of our people is reproducing itself at such a rapid pace as to supply far more fresh capital than is needed at home, so that every year finds us with a great deal of money to spare for investment in other countries. We are taking our place beside England and France as a free and generous lender of capital to smaller but growing nations.

Only since the close of the Spanish War has the United States participated with the much older nations in lending money to Japan, China, Mexico, and the South American republics. In less than fifty years—one might

almost say in twenty years—this country has attained that position of affluence which prompts the reference to us as the land of a thousand millionaires.

The latest and most striking evidence of the growing power of the United States in international finance has been disclosed during the European war. Chiefly on account of the large trade balance in its favor, the lessened demand for money in its own industries as a result of the stagnation in business upon the outbreak of the war, and the beneficial effects of the Federal Reserve system, surplus funds piled up to undreamed of proportions. Not only was she able to refinance her own maturities during this period and buy back many million dollars' worth of securities, which were returned from abroad, but she was able also to extend large loans and credits to both the peaceful and belligerent nations of the world.

Beneath this phenomenal growth in wealth must be the intelligent employment of capital. What does this mean but the making of shrewd investments? Were this not a fact, we could hardly have financed the Civil and Spanish American wars, built over 300,000 miles of railroad and twice as many miles of local traction and interurban lines, vast public improvements, splendid harbors, and gas and electric light plants; opened up mines of coal, silver, copper, and gold; built immense refineries and smelting plants; and reared all about us industries which are simply gigantic in the wealth they control and the amount of labor they employ.

If George Washington were to come back to life, he would be lost in amazement at the changes wrought in this country, although little more than a hundred years has passed since he was laid to rest at Mt. Vernon. It would seem to him as if some wizard had visited the land and wrought this remarkable change. Yet this wizard

has been none other than capital—money profitably invested. Have we not here a concrete example of the uniform success of intelligent investment? Does it not plainly indicate that where prudence is exercised in the diversification of investments there need be little fear as to the safety of the capital employed?

TEST QUESTIONS

1. What sort of risks are unpredictable in business affairs?
2. By what means are risks distributed in investment?
3. How do savings banks use the law of averages of risk in the management of their affairs?
4. What is meant by a bond being a legal investment for savings banks?
5. How may an individual investor apply the principle of diversity of investments?
6. What are some of the principles to be observed in diversity of investments?
7. What factors determine the degree of safety of bonds?
8. What effect does the degree of safety have upon interest rates?
9. How does the law of supply and demand operate in the security market?
10. What effect does the production of gold have upon security prices?
11. What are some of the evidences of the growing financial power of the United States?
12. What does all this indicate with reference to American business ability?

CHAPTER III

FARM LOANS AND MORTGAGES

Loans on Farm Lands

Loans on farm lands were no doubt the earliest form of investment, since the first and principal occupation of civilization was agriculture. Originally such loans were made in a most primitive way. When the human race was young and acquiring its first taste of civilization, it was the practice of a landowner who prospered above his neighbor from the bounty of Mother Earth to make loans of seed or live stock on consideration that he receive in return a certain portion of the borrower's next season's harvest or a certain number of the offspring of the live stock loaned.

As civilization made progress, it was found far more convenient to settle for all obligations by the payment of gold and silver; but in those early and primitive days, when the commercial relations between men and races were carried on crudely, lenders of capital were satisfied to accept the pledges of borrowers as men of honor who agreed to pay their loans on a stipulated day, or forfeit their land, cattle, implements, or whatever they pledged to secure them.

Farm Mortgages

Out of such transactions grew the modern indenture. By this is meant the mortgage or contract which today

gally binds the borrower to reimburse the lender for a an with a stipulated rate of interest and empowers the older of the mortgage to proceed by law, through fore-osure proceedings, to take possession of the pledged roperty and dispose of it in order to protect himself gainst any loss of capital and interest.

The phrasing of mortgages has undergone consider-ble change. There was a time when the holder of a ortgage could take possession of property upon default f payment and keep it all. Now the law goes so far as o protect the borrower in maintaining his full rights in hat equities may exist over a loan. That is to say, very dollar realized above the face of a loan, the accrued terest, and all costs involved by what legal proceedings e necessary to enforce payment, reverts to the borrower. he mortgage today is a legal instrument devised to rotect lenders of capital to the extent of their loans, terest due, and all costs, but no further. It does not ive them any unfair advantages over distressed debtors. he form of a typical mortgage is shown in Figure 1.

Not only are loans on agricultural lands the oldest of which we have any record, but they have also proved the most satisfactory. Of the world's available capital a very large, if not the largest, portion is either invested outright or loaned out in farm land and other real estate.

What makes loans so satisfactory when placed on the individual's home or farm is the fact that a man will go to extreme lengths and exhaust all his available resources to satisfy a mortgage and continue the prompt payment of interest as it falls due, rather than lose the place he calls his home. Next to the immediate members of his family, his home is dearest to him. This is why such loans are regarded as having, in addition to the physical assets pledged as securities, a moral asset—the pride of the individual in keeping a roof over his family.

Bank Loans

Our small interior banks are by far the largest lenders of capital on farm mortgages. Insurance companies come next and after them follows the private investor. That this should be the case is largely the outcome of a community of interest. Banks and private bankers in the small towns and villages which are the hubs for farming sections, must depend principally upon the tillers of the soil for their business. The deposits of the latter they in turn lend out to their customers on the only collateral the farmers can offer, their land, live stock, or crops.

These bankers also, knowing more intimately the value of the farm lands by which they are surrounded, feel a great deal safer about their loans when they are put out on such collateral. Yet their aggregate resources, and they are by no means small, have often proved insufficient to finance all the farm loans sought.

In the North, South, East, and West, everywhere in fact where there is a prosperous farming community, there are brokers who do nothing but make loans on farm mortgages, which in turn they sell to institutions and investors, for whom they act as agents for the collection of interest and principal when the mortgages mature. The banks frequently find it to their pecuniary advantage to let outside investors have part of their farm mortgages, for the oftener they are able to turn over their loanable funds, the more money they can make.

Insurance Company Loans

The large insurance companies, on the other hand, are impelled by two reasons in diverting part of their large resources to farm loans: (1) It is necessary to diversify

their investments; (2) the legal rate of interest in different states varies to such an extent that it affords them the opportunity to increase their income yield on all their outstanding investments.

Rate of Interest

For example, the legal rate of interest which may be charged by lenders of money in Illinois is 6 per cent, but in Georgia it is 8 per cent, while in some of the far western states as high as 12 per cent can be demanded. This difference in the rate of interest which borrowers must pay is not brought about, as might be supposed, by any variation in the degree of safety in the collateral they furnish, but is determined by the abundance or scarcity of available capital. Such states as New York, Illinois, Indiana, and Massachusetts are more fortunate in the abundance of capital than less favored states and this is what makes it possible to borrow at a smaller rate of interest than in the less populous states. In fact in these more settled communities, capital, in its eager hunt for desirable loans, comes into such keen competition as to offer itself at less than the interest which the state has fixed upon as legal. Thus it happens that in Massachusetts, Illinois, and other eastern and central states, the owners of fertile and productive farms can, without difficulty, obtain loans on a 5 per cent basis.

Although Georgia may have lands whose output of cotton and other crops indigenous to her soil will bring as much profit as the wheat and maize of the loamy, black belt of Central Illinois, its wealth is not sufficient to finance all the needs of its people and it must provide a legal interest rate attractive enough to draw to it capital which is beyond its borders. It is an axiom that the less populated a state, the smaller its resources and

the more are its people dependent upon capital from the outside, for, after all, money is but a commodity to be bargained for and lets itself out at the best price obtainable.

Maximum Loans on Land

In different states the rules vary as to the extent to which loans may be made on farm property. In some places where farm lands, because of their productivity, are in eager demand, money may be borrowed on them up to 60 and even 70 per cent of their appraised market value, whereas in states where the farms are still comparatively new and the lands are not as readily saleable in the event that they must be sold to satisfy the loan, their borrowing capacity is restricted to a much lower percentage. It is the demand for the land which determines the equities insisted upon before a loan is obtainable, and not so much the fertility and productiveness of the land itself. It is true of the interest that is exacted from borrowers.

Mortgage and Bond Houses

The history of this form of investment would not be complete without a brief mention of an interesting development in the placing of farm mortgages. I have in mind the large business that is done in farm mortgages today among the class of smaller investors, who, while not in a position to purchase such securities outright, are still favored with an opportunity to place their capital in them.

From the demand of the smaller investors for farm mortgages as their ideal type of security, large companies have come into existence which sell notes of their own, secured by farm mortgages. The capital they

obtain from the sale of their obligations they place out in farm mortgages, which mortgages are, in turn, deposited with some trustee as a security for their pledges to their clients. These notes are often known as "debenture bonds." Sometimes they are otherwise designated; for example, a large western concern calls its notes "land grants," although they are in the usual form and are sold in as small a denomination as $100. These institutions have made their notes so attractive to small investors that it is possible to sell them on easy payments.

The Influence of Loans on Money

At times the borrowing requirements of our farmers play a very important part in our economic life. They must move their crops, and only money will do this. Thus it happens that around harvest time the interior banks find it necessary and profitable to advance money to farmers on their notes, secured by the crops, until they can send the produce to the central markets.

It has often happened that these loans have been precursors of a tight money market at a time when the available capital of the country has been insufficient to finance both the movements of the harvest and the expansion of industry. While a tight money market may be produced by other causes, more often it is superinduced by this annual crop demand upon the resources of our banks.

When this effect is produced in our financial centers, it is called a pinch in money. No doubt you have heard the term. As a business man and accustomed to negotiating loans at your bank, possibly you have personally felt its effects when your banker informed you that it was necessary to increase your interest rate until money

became easier. By advancing interest rates, bankers aim to keep down loans within their available resources.

TEST QUESTIONS

1. What was probably the earliest form of investment?
2. Describe briefly the history of farm loans.
3. What are some of the outstanding characteristics of a modern mortgage?
4. To what extent are bank loans employed in farm mortgages?
5. Why do insurance companies invest heavily in farm mortgages?
6. What determines the rate of interest on farm mortgages? How does it compare with other securities?
7. What factors determine the maximum loans that may be secured on land?
8. Explain the work of mortgage bond houses in placing farm loans.
9. Show how harvest time affects interest rates on loans.

CHAPTER IV

CITY REAL ESTATE

City Real Estate Values

It is by no means as simple a matter to select investments in real estate in large cities as in farm lands. When once a thorough knowledge of the fertility of agricultural land and its nearness to a market has been gained, there is a fair basis for safely determining its value for the purpose of outright purchase or as collateral for loans. But it is necessary to apply different methods to city property. Location, the density of population, and other factors in each urban community, have much to do with its value. Under favorable conditions and environment a parcel of city land may undergo a phenomenal appreciation. Again, changes may occur to cause a sharp decline, especially where property has gone up too rapidly. Real estate booms are not always the healthiest thing for a community; sometimes they peter out fast.

The congestion of population in certain localities has been remarkable, so much so as to result in making the owners of property fabulously wealthy. That was because the land, being a stationary quantity, always located in the same place, had to serve the requirements of a multitude instead of a few. It stands to reason that the more the land is required by a population, constantly growing in density, the higher prices it will command.

We see and we wonder at the prevailing tendency, so noticeable in our large cities, to build high up in the air. But there is really nothing mysterious about it; where land has become valuable, as happens to be the case in our many large cities, it has become, from an economical standpoint, much cheaper to reach up than to spread out over the ground.

Nowhere have we a more striking illustration of this development than in New York City, situated as it is on a small island, its growth restricted on all sides by water. Almost all the available property is already occupied. The city's area is insufficient, and each year is growing more so, to provide comfortably for the density of the population. The natural outcome is that the city has become a city of skyscrapers, each vying with the other in a frenzied effort to pierce the clouds. Nor are these tall structures confined to the business sections; residential property also has become scarce enough to force the community to erect row after row of tall apartment houses, providing homes for hundreds of families as a measure of relief from the pressing demand for living quarters. Similar conditions, in a less degree, prevail in our other large cities.

Where land is in such demand, the natural evolution will be a continuous enhancement in value. To what astonishing lengths this appreciation can sometimes reach is illustrated by a sale made a few years ago of a small piece of property in the financial district of New York, barely large enough for an ordinary sized dwelling, at a price of $600 a square foot. By erecting on this property a tall office building the investment was made to pay. It was not difficult to fill the structure with tenants willing to pay rents high enough to bring a satisfactory income on the money put into the building.

Four hundred years back, the whole island of Manhattan could have been purchased for the present price of one square foot of this property, for the value of the trinkets Peter Minuet turned over to the Indians in order to acquire possession of it, was hardly more than $600. Yet were this land not serving a dense population and situated where it could be used only for agricultural purposes, it would be almost worthless, so rocky and barren is the soil.

The growth of our urban population has opened a field for the exploitation of capital on a scale, the magnitude of which is almost inconceivable. It has made it necessary in the purchase of a great deal of such real estate to depend in a large measure on borrowed capital. Savings banks especially find it profitable to place a greater part of their deposits in loans on city property in the form of first mortgages. But as a safeguard they confine their loans to improved property already used for either business or residential purposes and bringing an income. Laws have been passed restricting the savings banks to loans of this character, to prevent their deposits from being tied up in property not producing any revenue. The idea is that this last-named class of property is not quickly salable.

Titles to Real Estate

Where the individual investor places his capital in loans on city real estate, whether he assumes the entire loan or but part of it, he should exercise the greatest care in selecting the property which is to serve as his collateral. The title to the property should be without a flaw, otherwise a cloud will be upon it, acting as a bar to its free and quick transfer. Without a clear title no loan should be made. Again all loans ought to be con-

fined to a certain proportion of the appraised value of the property to provide a sufficient equity to protect the loan. Real estate values can easily be ascertained, for every city keeps a careful record, for the purpose of collecting taxes, of all transfers of property, and these records are open to inspection.

Even here modern methods have simplified this necessary work of investigation. In every city of importance, institutions have grown up which make it their business to search real estate titles, for which service they charge a nominal fee. Their records are so complete that their abstracts of title are accepted without question. When they guarantee their titles, as most of these companies will, they insure their clients against loss from any flaws. They have reduced the work of searching titles to such a degree of accuracy that today few sales or loans are made without a guarantee of title from them.

Maximum Loans

As for the borrowing capacity of real estate, this is determined largely by its location. It is greater, the nearer the land is to the center of business and to transportation facilities. More money can be borrowed when there are improvements in the form of buildings upon the property, for such real estate is more readily salable and is more likely to enhance in value as the population increases. Of all property, outlying and unimproved suburban real estate is the most unsatisfactory collateral, as it lacks these essential requirements.

Source of Capital

The capital which finds its way into real estate investments is drawn from various sources, coming alike from large financial institutions, from wealthy individual

investors, and from the humble and thrifty masses. There is an enormous business transacted in real estate mortgages. To serve investors who are not able to buy mortgages outright, large financial institutions have evolved what is called a first-mortgage real estate bond. These bonds they guarantee for both the money invested in them and the interest. This they can well do, for they first thoroughly appraise the value of the property on which the bonds are a mortgage, and satisfy themselves regarding the titles. In New York City there are several of these concerns which have behind them resources in excess of a hundred million dollars, and in no case has there ever been a default in the payment of principal or interest in the mortgage bonds behind which stands their guarantee. This merely serves to show how careful they are with their loans. Their mortgage bonds are sold at a figure producing an income ranging between 4½ and 5 per cent, as they are a part of a first mortgage loan and the laws of safety and prudence require that such loans be confined to desirable property.

Large office buildings, factories, and apartment houses are being financed more and more with outside capital. A blanket mortgage or a trust deed is placed on these structures and divided into bonds of small denominations. These bonds are then offered investors on an attractive basis. This class of business is growing to large proportions. Conservative bankers find it profitable, and the bonds, when issued within proper restrictions, are an excellent security for the medium-grade investor.

No first mortgage real estate bond should be accepted as such unless it is so stipulated on the face of the bond and in the indenture of the mortgage. There are second and third mortgage real estate bonds, but they are graded

as more speculative, as they are but a lien on the value of the equity above the first mortgage. This shows how much care should be exercised in their selection. While some of these mortgages may be perfectly sound, in troublesome financial periods they are not the most desirable class of securities to hold, especially when they are a lien on out-of-the-way real estate.

Unless such mortgages are secured by centrally located property, with a liberal margin of value above the underlying mortgages, banks will hesitate to lend any money on them, while savings banks are restricted by law in most states from considering such mortgages at all as collateral for loans.

Second and third mortgages are largely the creation of builders. To make it as easy as possible for buyers of homes to pay off their obligations, they undertake to carry a second mortgage payable in a year or more. It is in this way that builders principally finance themselves.

To show how undesirable are such mortgages, I know of an instance where a woman in the panic of 1907 was compelled to pay a bonus of $100 to renew a second mortgage of $1,000 on a substantial home in Brooklyn. Her interest for one year, including this bonus, came to 16 per cent. This is fairly indicative of the element of risk that capital considers it assumes on such obligations.

Real Estate Debenture Bonds

There have also developed, as a result of the large operations in real estate, corporations offering investors somewhat more inviting inducements for the use of their capital in extending their operations in real estate. A number of these companies have been very successful, and their securities are favorably received in conserva-

tive financial circles. Their securities are known as debenture bonds. They are not first mortgage bonds, but merely notes of these corporations and of course, to make them attractive, they are placed on a 6 per cent income basis.

Some of the younger real estate and holding corporations fix the interest on their debenture bonds at a still more attractive figure, but it is well for the investor to remember that his risk increases in proportion to the interest that is paid on his money. In normal times it is not difficult, in a large city, to raise money on real estate at from 5 to 6 per cent, even when it is located in the outlying sections, and any higher rate should be carefully scrutinized.

As real estate debenture bonds have no other security behind them than the credit of the corporations issuing them, it is advisable to inspect carefully their financial condition. The conservatively managed companies are aware of the need of inspiring confidence in their obligations if they are to find a ready market for them, and they accordingly make known their actual financial condition at least once a year. Some of them even go beyond merely publishing a balance sheet; they employ chartered accountants to certify to the correctness of the various items of assets and liabilities, and reliable real estate appraisers to check over their real estate holdings, to assure their bondholders against any inflation or reckless management of the funds intrusted to their care.

It is well for the purchasers of the securities of the numerous real estate concerns to insist upon a complete statement, not only of their financial condition, but of the location of their properties. In recent years quite a number of these concerns have sprung up, some of which have since gone under as a result of their mushroom

character. Their real estate holdings may be situated in the outlying suburbs, at a considerable distance from transportation facilities; their value may also be inflated, as there is no check upon their appraisals where no independent estimate has been made by competent real estate experts.

Some of these concerns, with an idea of inspiring confidence, have christened their securities with high-sounding titles such as "participating bonds," "mutual profit-sharing bonds," and the like. Names do not impart security. A number of such securities, after a personal investigation, have been found as hollow as a bell.

Leasehold Bonds

Leasehold bonds are the latest form of real estate bonds. So far, they are a security largely confined to New York City, where property has become too valuable for their owners to sell it outright.

The Astor, Goelet, Rhinelander, and other large New York estates owning valuable tracts of land in the heart of the city follow the system of leasing their property for a term of years at a stipulated annual rental. It is arranged with the leaseholders that the improvements they make are to be turned over to the owners of the property at the expiration of the lease for an agreed sum. Leaseholds are transferable in the same manner and form as are deeds. Bonds are also issued against these leaseholds, but for the protection of the investors they should mature before the lease expires, and there should be set aside a certain portion of the revenues each year as a sinking fund to retire the bonds when they fall due.

The outright purchase of real estate must be largely determined by location and the income it produces. No

general rule can be laid down. However, it is advisable under all circumstances, before buying real estate, to make a personal investigation of the property or employ a capable, experienced, and honest real estate agent to make an appraisal of its value. Where this is done, there is little danger of making any serious mistakes.

TEST QUESTIONS

1. Why are different tests necessary in valuing city real estate than in valuing farm property?
2. What effect does congestion of population have upon city real estate values?
3. Why are skyscrapers resorted to in large cities?
4. What factors determine the amount of a loan that may be advanced upon city real estate?
5. Describe the source from which funds for real estate loans are secured.
6. Explain the real estate bond.
7. How do second and third real estate mortgages arise? What is their investment value?
8. Explain real estate debenture bonds.
9. What is the nature of leasehold bonds?
10. What factor should be considered in buying real estate outright?

CHAPTER V

LAND AND REAL ESTATE BOOMS

Value of Booms

We ought not to be too hasty in deprecating, as we are often inclined to do, the periodical outbursts of speculation in land in this country. This is a healthful symptom of a growing nation's strong vitality, which, impatient of expanding normally, attempts to spread out with leaps and bounds.

While it may be true that trying to forge ahead faster than our resources permit brings exhaustion as a penalty until we can again take breath to catch up with the fast pace set, the benefits of a permanent character resulting from extensive speculation in land are beyond computation. Without the speculation it is seriously to be questioned whether this country would have grown as rapidly as it has in the last fifty years or the Great West have become so densely populated.

There is always the strongest sort of incentive for the development of new agricultural resources behind every boom in land. The people who participate in them are largely farmers who are not satisfied, in the purchase of new farm lands, to hold them for an increase in their value. They intend to operate and to make their profits out of the larger crops they expect to raise from the new soil, more prolific because it has not been worked over and over again. Moreover, where men flock, there

the railroad follows, and other conveniences necessary to a growing community. New towns spring up and a demand for new industries develops, which capital is always prepared to support when it sees there is a necessity for them. Considering the general benefits arising from land booms, we can, broadly speaking, well afford to suffer what temporary ill effects follow in their wake.

Universal Interest in Booms

Nor is it a racial instinct peculiar to us that we become occasionally obsessed with a blind belief in the possibility of making a great deal of money quickly out of land through an immediate increase in values. The same trait may be detected in the people of most of the other nations whose agricultural resources have not been fully developed.

It is true that the Pilgrims who came over in the Mayflower sought our Massachusetts shores to escape religious persecution, but those who followed them in a steady and constantly growing stream, were impelled by a wholly different reason. The letters the Pilgrims sent back home telling of the bounteous returns their farms in the new world brought forth, inspired others to tempt fortune in the larger opportunities the New World had to offer. The same was true of the Dutch who settled in New Amsterdam, and of the Cavaliers who established themselves in new homes in Virginia and other neighboring southern states skirting the Atlantic Ocean.

The farmer is as instinctively human as are his brethren in the large cities. He wants to make money. If he can dispose of his farm at a good profit, there is a strong inclination in him to take advantage of such an opportunity. Such chances, farmers in our more densely populated states have had in plenty. In comparing the

statistics with respect to the value of farm lands in the central and western states east of the Rocky Mountains, shortly after the Civil War, with those of present values, we are struck with the phenomenal increase that has taken place within this comparatively short period. Farms which in the early seventies could have been purchased for from $10 to $15 an acre, are now not obtainable at less than $100 to $125 an acre.

Even within the memory of the rising generation startling increases in land values have taken place. The opening of the Sioux Reservation in South Dakota is a case in point. The settlers who flocked to this reservation when the Government opened it, were able to buy the land for a trifling sum per acre. This very same land, now cultivated, changes hands at $60 and upward an acre, while lots in the new towns which grew up in what was then only a grazing country, which might have been had for a few dollars, have increased in value from 100 to 1,000 per cent.

Thus it was also with Oklahoma and Indian Territory. When these new territories were opened for settlement, land was extremely cheap, but the pioneer farmers who located there have become rich from the soil's fertility and the rise in values.

Within the last few years, however, we have witnessed a remarkable change in land speculation. There has been a steady migration of American farmers into the new wheat belts of Canada. Those who have watched this movement estimate, and their estimate is considered conservative, that at least 300,000 American farmers have gone into Manitoba, Alberta, and Saskatchewan, to establish new homes for themselves, having heard of the possibilities of raising large crops in these lands. Rapid extension in railroad building has followed in their foot-

steps to provide adequate transportation facilities for the movement of their crops.

But this migration to a neighboring country embodies no unusual aspects. There is a good reason for it. Most of the natural arable soil in the United States has already been taken up and exploited; there remains but very little new land available, that is, adaptable to the money-making opportunities associated with new and virgin lands. What will be the result? Henceforth we are less likely to witness such widespread land booms as marked so conspicuously that period of our growth between the seventies and the early nineties. The value of our arable lands will, of course, continue to increase, but this increase will be on a more uniform and conservative scale because of the restricted opportunities.

Within recent years speculations on a large scale have taken place in irrigated lands. Where water has been plentiful this form of farming has proved very profitable. In some districts crops are being raised in proportions impossible on arable farm lands. The Government and private capital are working hand in hand to reclaim a great many millions of acres of arid land capable of being properly irrigated. In connection with the development of these arid regions, there has been considerable speculation. Some of the investments have proved profitable, while others were nothing more than wild cat schemes.

In a great many sections of the country, swamp lands are being drained to meet the cry for more land. Some of the gigantic undertakings in the Red River Valley, Florida, and other regions have been very successful. This work has opened large areas to profitable use and consequently has stimulated a speculative interest in such lands. The demand is constantly for more land to raise

the common necessities of life for a continually increasing population.

Dangers in Land Speculation

So far we have considered only broadly the beneficial effects of speculation. For guidance to the individual who may regard with favor the speculative opportunities in the purchase of land, the proposition must be considered from a different and more specific viewpoint. Unless one is thoroughly familiar with the science of farming, he is apt to blunder seriously in making an investment in farm land, for not all land is what it is represented to be. Associated with every land boom is the violent tendency to rush values upward, far ahead of the purchasing power, and in consequence there is always the danger of buying at the crest of a speculative wave and finding one's self with property that has to be held for some years before it can be sold at a profit. Meanwhile the investment yields no income such as capital is supposed to produce to be profitably employed. In addition there is a direct loss, for taxes must be paid and improvements made from time to time, all of which call for the outlay of more capital. It may even happen that the land will never again bring the price it cost. There are many localities where this has been the general experience.

With a person who buys farm land for the purpose of cultivating it, there is not this danger. He can make his property produce an income while he is holding it to resell at a profit. In buying land, whether for investment or speculation, it is always the safer course, where it is at all possible, first to visit the land and make a thorough investigation, not only with regard to its own fertility, but to obtain an idea of the value of neighbor-

ing farm lands. Where this is done, the danger of buying at inflated values is very much lessened. If a personal inspection is not possible, the next best step is to depend upon the judgment of some one familiar with farming. But the very best thing for a person who is himself incapable of cultivating a farm, is to forego such speculative opportunities, for the risk is always greatest where one has the least knowledge about the character of the enterprise in which he speculates.

Large-Scale Farming

It is impossible to elaborate in detail on the different phases of speculation in land within the restricted space which I am allowed. I can only discuss it in the broadest light and attempt to lay down such general rules for guidance as are the most important, but I could not complete this section without touching upon the many schemes launched from time to time to interest capital in co-operative farming.

So far as I can determine, only a few such plans have proved profitable to those who have placed their money in them. There have been plantation schemes innumerable, launched in the last few years, a great many in Mexico, some in other tropical countries. These plans appear feasible enough. The idea is to cultivate one big plantation and divide the proceeds from each harvest among the many different owners who are the certificate holders. The main trouble with most of these enterprises is that they begin with an excessive capitalization, representing more than the land can possibly be worth even many years hence. Where this is not the mistake, the chief trouble lies in inexperience in handling a plantation. Overseers are employed who know little about the climatic conditions and about raising the crops indig-

enous to a tropical country. One might as well transplant a native of Mexico or Yucatan to an Illinois farm and expect from him the same degree of efficiency as from a farmer accustomed to the soil and methods of cultivation. Rubber plantations, for example, are plentiful, but financially they have rarely proved successful. All phases of farming seem to have defied so far all efforts to reduce them to a co-operative basis. It still remains an individual art.

Of late there has appeared a tendency to concentrate the ownership of large agricultural properties in this country into stock companies. In the Northwest there have sprung up orchard schemes in which private investors are solicited to take "units," each unit representing the ownership of either one or a given number of acres, and the proceeds from the fruits raised on the property are apportioned among the unit holders. This idea is a new one. It is yet too early to judge whether the plan can be made a permanent success, financially. So far it has been experimental. The idea, however, is being applied to other products of the soil, to oranges, to bananas, and even to nuts in the South. I have even become aware recently of an ambitious plan to operate a large wheat farm in Canada on the same lines. But I still hold that the most profitable farming is that in which the owner of the land directly superintends the cultivation instead of delegating it to strangers, who cannot be expected to have the same interest in its success as the real owners.

Suburban Real Estate

Suburban real estate is and always will be a popular outlet for the speculative inclinations of a community, because there considerable money has been made by

those who were either wise in their selections or fortunate. As a city grows in population, the tendency is to spread out on adjoining lands. Much money is also lost in such speculations. Take for example New York City. As the city is constituted at present, it covers five boroughs, including Staten Island. Boomers of New York City suburban properties will so word their announcements as to convey the impression that their property is a part of the city proper, when this is far from the case. How much one may be deceived is shown by the case of two small suburbs on the Long Island Railroad. One of these places is 36 miles distant from the City Hall, the other but 29 miles; yet the price placed on lots in the suburb farther away averages about $200 a lot, whereas lots of the same area in the suburb nearer the city, which has equally good transportation facilities and requires less time to reach, are to be had at less than $100. Here is an object lesson which requires no further discussion.

The same inflation can be found in suburban real estate outside the limits of most of our large cities. Chicago, when it had its suburban real estate boom previous to the World's Fair, was similarly afflicted. Lots bought in some of the mushroom outlying settlements have never again seen their first offering price and are likely never to see it again, as the city's growth has not extended so far or has gone in different directions.

Suburban real estate, or even city real estate proper, should never be purchased on mere say-so or description. It should first be visited by the purchaser, who at the same time should spend a little time looking into property values in the neighborhood and finding out about transportation facilities. Transportation really makes the property and lays the foundation for an

increase in its value. The people who live in the suburbs do so for economical reasons. They can build their homes and maintain them more cheaply than in the city itself. But they must have quick transit facilities to and from their occupations. Along the principal avenue of the movements of this element of the population, real estate will always prove profitable speculation. The art lies in finding where that is and then getting property on a reasonable basis of value.

TEST QUESTIONS

1. Show how land booms may benefit communities.
2. Give some notable illustrations of land booms.
3. Why are extensive land booms in the United States not likely to take place again?
4. What factors should be considered before purchasing a farm?
5. Explain the stock-company plan of owning large agricultural properties. In what industries has it been used extensively?
6. Why are suburban real estate booms frequent? What dangers do they present for the investor?
7. What are some of the essential matters to consider when investing in suburban real estate?

CHAPTER VI

THE MULTIPLICITY AND COMPLEXITY OF BONDS

Classification of Bonds

It is possible to form a clear conception of the many different types of securities marked as bonds on the shelves of investment dealers only when they are grouped one after the other in their order of importance and marshalled before the mental vision. We may then gain a fair idea, not alone of their variety, but of their multiplicity, and from that realize how their complex character may confuse investors unless they are thoroughly informed on this kind of investments.

Bonds may be classified in many different ways. The classifications used by financial writers differ in detail even though they are built upon practically the same foundations. The variety of bonds is so great that it is impossible to make a classification that admits of no variation. The important point is to understand the basis of classification used in a discussion.

There are essentially five different bases that may be used in judging the value of a bond.

1. The security for payment.
2. The purpose of the bond issue.
3. The manner of payment.
4. Conditions of redemption.
5. The nature of the issuing company.

A classification based upon the security of the bonds involves a discussion of such terms as mortgage, terminal, collateral trust, debenture, and income bonds.

As to security, bonds are essentially of two kinds: Those with specially pledged securities, such as mortgage and collateral trust bonds, and those with no special security, such as debenture and income bonds. Various special classes, such as terminal and divisional bonds, are really mortgage bonds with a limited portion of the company's property pledged for redemption.

A classification of bonds based upon the purposes of the bond issue involves the use of such qualifying terms as unifying, refunding, construction, and extension.

A classification based upon the manner of payment uses the simple division into coupon and registered bonds. Registration may apply to principal or interest, or both.

When the manner of redemption of bonds is considered, we get such classes as gold, redeemable, irredeemable, serial, and convertible bonds.

When the nature of the issuing company is used as a basis for classification, we get the familiar market quotation classification of railroad bonds, public utility bonds, industrial bonds, and governmental bonds.

In connection with each class of bonds, the reader should bear in mind that they may fall under several or all of these classifications, depending upon the point of view. Thus a first mortgage bond of a railroad company may be for construction purposes, registered as to principal and interest, and redeemable at a fixed period in gold.

The following classification of bonds emphasizes these features, giving in the first columns a general classification, in the second column the enterprises against which issued, and in the third column the nature of the bonds themselves:

	United States	War
		Canals
		Internal improvements
		Public buildings
		Drainage
Governmental	State	Pavement
		Highway
		Lighting
		Gas
		Waterworks
	Municipal	Sinking fund

	Steam railway	Mortgage
		Improvement
Railroad		Extension
		Construction
		Division
	Electric interurban	Unifying
		Collateral trust
	Street railway	Debenture
Public Utility.......	Heating	Sinking fund
	Gas and electric	Terminal
	Water	Land grant
		Real estate
		Car trust
	Manufacturing	Participating
	Real estate	Profit-sharing
	Timber	Income
Industrial	Mining	Convertible
	Irrigation	Serial
	Power	Coupon or registered

This confusion in the varieties of bonds should not center the investor's interest in the methods of issuance or in their manner of payment. The collateral that secures them is what counts. Here is where the investor must exercise precaution. Often his power of judgment must be developed to a very high degree. Essentially one factor must be determined by bondholders for their protection, and that is the equity existing behind the loan. In the process of making the simplest loan, no one

would think of accepting as security any pledge which will not, if sold, realize at once the face of the loan, together with all accumulated interest and all the expense caused by the legal enforcement of its payment. It is necessary, as a precautionary measure against possible loss in the event of a default on the part of the borrower, whether for interest or the payment of the principal, to exact a certain marketable value in excess of the loan. This is referred to in financial circles as the equity.

Investors should measure bonds by the same yardstick. The smaller the equity the more speculative is a bond, and in turn the better income should it yield to balance the larger risk the holder must assume. Bondholders are creditors of a corporation. They are unlike stockholders, who divide what profits are made. They lend their capital in return for a fixed interest, and ought, by the very nature of their position as creditors, to be amply secured against any and all stressful business weather a corporation may meet. For that very reason the collateral pledged behind bonds ought at all times to be subjected to the most exacting investigation.

Coupon and Registered Bonds

Attached to the bonds are small coupons. If the interest on a twenty-year bond is made payable semi-annually on the first days of January and July and is at the rate of 5 per cent per annum, there are appended to each $1,000 bond 40 separate coupons, each stipulating that there will be paid on a given date, at a certain place agreed upon, the sum of $25, usually in gold. In a similar manner will the principal of the bond be paid when the date of maturity is reached. All that is required of the holder of the bond is to clip off these coupons as they fall due and deposit them with his bank

for collection, or he can present them in person, or request that payment be made by sending in the coupons.

To make it as convenient as possible for bondholders, these bonds may be registered with the corporations issuing them; that is, the bonds can be left in their custody, with the name and address of the person to whom checks for the interest and principal should be mailed. Most bonds are made out to the bearer. This is done to make possible their speedy sale and transfer. Therefore, in case they are lost or stolen and fall into a third person's possession, the loss will fall upon the original owner. To safeguard against such an event, timid investors and trustees of estates quite often register their bonds, even though they are aware that their securities, lacking the advantages of a quick transfer, may realize, if sold, a fraction less on account of the delay in delivery, as the bonds must first be released on the corporation's books. As the interest on the bonds falls due, it is deposited with the bank where it is paid, and disbursed as the coupons are presented.

Redemption of Bonds

No bonds can be called for payment unless there is a stipulation to that effect. Our early railroad builders never expected to witness such a rapid expansion in value in their properties as occurred in their lifetime. Had they foreseen it, they would have made some provision to cancel their first mortgage bonds earlier than the full term of the loan, so as to leave their path clear of obstructions to raise additional money as the growth of their railroads required it.

Only a few years ago some of the Chicago & North Western first mortgage 7 per cent bonds matured. This premier railroad system created these bonds when the

West was still young, at a time when it was not as easy to borrow money as now, and the builders of the system, not to burden it for a long term of years with repayment of the money for its construction, imagined they were driving a shrewd financial bargain when they made these bonds payable in forty and fifty years. But they seriously erred. Long before these bonds reached their date of maturity, the Chicago & North Western was able to borrow whatever money was required to finance all improvements and extensions with bonds bearing even as low an interest rate as 3½ per cent. Moreover (and this would have been a still greater surprise to the founders of this property) these low interest-bearing bonds brought par, whereas in their day, to make their 7 per cent bonds attractive, they were forced to offer them at a considerable discount.

This hard lesson of our earlier financing of our railroads has never since been neglected. Now, when a railroad or any corporation pledges any of its property as security for a bond issue and anticipates that in the course of time the property will enhance greatly in value or the opportunity may arise to borrow money more cheaply, it includes in the mortgage the privilege of calling in the bonds for payment, on any given interest date, usually at a premium of from 5 to 10 per cent. We often see in a bond the words "callable on any interest day on ——— weeks' previous notice at ——— with accrued interest," meaning the interest due for the period between the last date when interest has been paid and the date when payment in full for the bonds is to be made.

A reduction of ½ per cent in interest on a large amount of money represents a tidy annual sum saved. Shrewd financiers fully realize this. Because of their

increased credit and the increased value of their property, a good many of our railroads could, in the course of years, have effected the saving of many millions of dollars by a cheaper rate of interest, had they been in the position to call their early bonds issued at a high rate of interest. As it was, they had to allow them to run out their term of issue.

Conclusion

What a multiplicity of all sorts and types of bonds now exists may be judged from the following partial list. There are government bonds, state, and municipal, the last-named being divided into direct obligations of the city, tax, drainage, pavement, road, highway, improvement, lighting, gas, water, assessment, boulevard, etc.; there are the first mortgage railroad and corporation bonds already described, and mortgage bonds following in sequence in regard to security; there are consolidated, extension, income, refunding, general, construction, terminal, improvement, divisional, equipment, convertible, collateral, lien, series, guaranteed, coal, timber, bridge, tunnel, vessel, debenture, participating, purchased-line, unified, branch-line, joint, stamped, adjustable, land-grant, canal, loan, underlying, redeemable, reorganization, tax-exempt, purchase-money, sinking-fund, convertible-debenture, and real estate bonds, and many other kinds. Besides these there are trust-receipt certificates and short-term notes.

When the investor arrays all these bonds before his mental vision, he will understand the full meaning of the multiplicity and complexity of bonds, which has resulted from the swift evolution of our modern finance. He will realize that a trained mind is necessary to judge the intrinsic value behind all these different names given

to bonds in this modern day, and he will also realize how a clever financier, under the guise of a bond, can dispose of a security which is no more a bond in the true sense of the term than is the paper on which this is printed.

TEST QUESTIONS

1. What are the five different bases which may be used in judging the value of a bond?
2. What are some of the distinguishing characteristics of bonds as judged from these different bases?
3. What are the four primary divisions into which investment bonds are generally grouped?
4. What is meant by the term "equity" as used in investment?
5. How does a bondholder differ from a stockholder?
6. What is the meaning of coupon and of registered bonds?
7. What is meant by callable bonds? What are their advantages from the standpoint of financing? How do they rank as investment securities?
8. How does the multiplicity of bonds make more necessary an intelligent understanding of bonds before their purchase?

CHAPTER VII

GOVERNMENT, STATE, AND MUNICIPAL BONDS

United States Bonds

Bonds issued by governments, states, and municipalities form a distinct class. The vast majority of these securities have no other pledge behind them than the credit of the nation or the community issuing them. Still they are looked upon as very desirable investments when representing the obligations of a prosperous people. There are some circumstances, however, under which bonds of this type are not attractive to the individual investor, in point of income.

Take our own government bonds, for example. The great bulk of them are owned by our national banks and only a small proportion by investors, considering the many millions of them that have been issued. If they are held at all by investors or estates, it is not because of the interest yielded, but on account of the assurance of their absolute safety.

Our National Bank Act made it compulsory with a national bank, before it could issue any bank notes, to deposit with the United States Treasurer, an equivalent amount of government bonds to secure the payment of these notes. Under the Federal Reserve Act of 1913, the reserve banks have the same privilege. Provision is made for gradually relieving the national banks of their bond holdings and canceling their note issues accord-

ingly. The reserve banks may be required to purchase these bonds, and they in turn will likely use them to secure a portion of their federal reserve notes. Since the reserve banks can secure note issues upon other assets than United States bonds, it is likely that there will be less demand among the banks for new bond issues hereafter.

As a result of this banking legislation, there is a broad market and a constant demand for our government bonds, a demand created by an artificial market which has made it possible for our Government to raise all the money it needs to provide for its fiscal requirements on a 2 per cent and 3 per cent basis and still place its securities at a premium. The banks find it profitable to pay this premium, for they secure a small income on the bonds after paying the tax and, with the notes they can issue, earn additional interest by lending this money out to customers. Without entering into the details of this operation, in which investors are not interested, it can be readily seen why it is that our nation's bonds bring such high prices, although they bear a low rate of interest.

Bonds of Foreign Governments

In England, the government bonds are known as consols. This name was derived from an act of the British Parliament consolidating the public debt, and the word is an abbreviation of consolidated. English consols, until recently, commanded a price realizing slightly over 2 per cent, but they have steadily fallen, since there has not been an artificial market for them as is the case in the United States with its national debt bonds. The banking system in Great Britain is also differently organized. There the note-issuing power is concentrated

in a central bank, the Bank of England. For a time, however, English consols were under an artificial stimulus through the adoption of a postal bank system which, by enactment of Parliament, could invest deposits only in British consols. As deposits fall off, so does the market, for the Government's securities narrow, at least, the artificial market provided by law. But even with the decline which has occurred and which at one time even before the war brought the price down to a figure not witnessed since 1848, consols still yielded less than 3 per cent, which showed that the staid British investor valued very highly the credit of his nation and was perfectly content with an income ranging between 2½ and 3 per cent.

All this was suddenly changed by the great catastrophe of 1914. The unprecedented demand of the European governments for capital with which to prosecute the war, and the element of doubt which existed in the minds of investors as to the final outcome, forced even Great Britain to pay more than 4 per cent on its war loans. In order to protect the holders of the old consols against the inevitable decline that would have taken place in their price in the face of the more favorable war loans, a conversion plan was adopted by means of which the holders of the old consols could convert into the new securities on such a basis as to protect their investment.

In like manner does the French peasant investor value the Government Rentes, as the French Government securities are called; the German, his government obligation; and the people of other prosperous nations, their own national securities. However, not all governments can borrow money on their credit as cheaply as the stronger powers. Credit with them varies, as it does with individuals. Some of the smaller nations are forced

to pay as high as 6 per cent for loans, and besides they not infrequently allow the underwriting bankers who take the loan and agree to place the bonds, a discount for their services. Some of the minor countries, where there is turbulence and internal strife constantly, cannot even borrow money unless at usurious rate of interest, because they have no stability to offer as an assurance that their loans will not be repudiated.

It cost Japan almost 6 per cent on its loans to finance its war with Russia. The Cuban Government had to pay the same rate. Even Russia, although known to have collected the largest reserve in gold owned by any European power, found it necessary, when in conflict with Japan, to tempt bankers and investors with a high interest rate before they would take its securities. The bonds issued by the governments of the Argentine Republic, Brazil, Chile, Bolivia, Honduras, and other South American Republics can be had on a basis close to 6 per cent. This does not at all reflect upon them; it merely fixes the position of their credit in the money capitals of the world. As their credit enhances they will be in a position to refund their outstanding loans on a lower interest basis. Mexico did this some years ago when it replaced a 4½ per cent loan with a 4 per cent bond, thus effecting quite a saving in fixed charges to the Government.

Security behind Government Bonds

The interest that government obligations call for is usually provided by the proceeds from taxation, external or internal. Some countries place a tax on certain widely used commodities and set the revenue aside for the payment of interest on the public debt. In no other way, except in isolated instances, are government bonds

secured. Should a government debt be repudiated, its payment to the holders of its obligations could not be enforced by recourse to law. The reason is that a government cannot be sued, since it is not amenable to the statutes of any other government, while its own people cannot recover from the institution that they themselves have created and whose laws to govern them they have enacted.

In our own country the freedom of the Government from any civil action even goes so far as to exempt the states. South Carolina repudiated some of the bonds issued during the reconstruction days and neither the interest nor the principal has ever been paid. Nor can the holders enforce payment. Some of the bondholders have attempted, and so far have succeeded, in getting a number of these bonds into the possession of another state, because one state can bring legal action against another to recover on a disputed claim. South Dakota did sue South Carolina in the United States Supreme Court to enforce the payment of these bonds and recovered judgment, but even then a state cannot collect, as it cannot attach the property or revenues of another state and certainly cannot take up arms against it to make it pay. In the end such matters must be left to the honor of a state for settlement.

State Bonds

The means the Government adopts to raise money are followed on a smaller scale by the forty-eight separate states. They have uses for funds likewise. Improvements in the highways are a constant necessity. There are the public buildings to provide for. The need of other improvements benefiting the people of the state is constantly arising. To provide the funds by direct taxation

would prove too burdensome, and it is unjust to force one generation to share the whole burden of financing some public undertaking, the advantage of which will be participated in by generations to come. The theory is, and it is a very good theory, that such debts should be divided equally and this is accomplished by issuing bonds running for a long term of years and carrying a fixed rate of interest. When such bonds are authorized, the state, usually through its elective officer, the state treasurer, invites bids for them and disposes of the bonds to the highest bidders.

The privilege of bidding for such bonds is not restricted. The humblest investor can make an offer and if it is among the successful tenders when the bonds are allotted to the highest bidders, he will obtain the bonds to the amount of his bid if there are enough to go around. There is one restriction, however, which has been adopted as a general practice to guarantee that the bonds will be taken by the successful bidders or bidder, and this is that a certified check for a nominal per cent must accompany the bids as a guarantee of good faith.

How unjust it would be to have one generation carry the entire burden of an important public improvement, can best be illustrated by the improvement and electrification of that great highway of commerce, the Erie Canal, by the state of New York. It is estimated that this work will cost about $100,000,000 and to provide the funds the legislature, a short time ago, authorized a state bond issue to the amount authorized as the work progresses. Posterity will derive greater benefit from this vast undertaking than will the present generation.

Some states whose credit is excellent, fix by statute the interest rate and even the price which must be realized for whatever bonds the legislature authorizes. But this

is not always an advantage. Capital may not be so available as to be attracted by a low rate of interest, and if this is true we witness the failure of a bond issue, because there are not sufficient bids for it. This has even happened with New York State, rich as it is. The state, in normal periods, experiences no difficulty in getting all the money for its requirements with a 3 per cent bond. Furthermore, bankers and investors bid eagerly for the bonds at a premium over the price fixed by law at which they may be sold. But during the depression following the 1907 panic, there was a time when the State Treasurer was compelled, because of the failure of bids, to come within the state law's requirements to purchase an issue of bonds with the available cash in the state's sinking funds. The line of demarcation in credit is as pronounced with states as it is in individuals. The far western and sparsely settled states are forced to pay larger interest to tempt capital. Thus we see that capital is a ruler whose power is supreme.

Municipal Bonds

Counties, large cities, and small municipalities borrow money on much the same lines of financing as are followed by the states and the general government. Here and there various restrictions exist, but in general they follow the same plan of raising funds. To prevent the cities from over-borrowing, most states have wisely fixed a limit. For example, no city in the majority of eastern states can legally authorize more bonds than will equal 10 per cent of the assessed valuation of the taxable property, and when it has reached this figure, it must wait until there has been an increase in the value of the assessable properties to permit adding to the public debt. This is a wise provision, as it acts as a safeguard

against creating an indebtedness beyond the ability of the population to carry comfortably. Such bonds are also disposed of by inviting public bids, which bids, by law, must be advertised. To give a distinct identity to these bonds, they are usually named after the purpose for which they are issued.

A city may decide on making some street improvements, and bonds be authorized for this purpose and designated as street improvement bonds; or they may be courthouse or school bonds, highway bonds, grading bonds, etc. Thus the character of a county, city, or municipal bond may be determined by the name employed to distinguish it from other bonds authorized by the same community. My space is too limited to go into all the details governing the many thousands of such obligations which have come into existence. I can only refer to them generally and in the broadest light. For instance, New York City now has a public debt in excess of $1,000,000,000, all of which is represented by a great many classes of designated bonds. New York City is a steady borrower. It needs money for docks, subways, boulevards, and many other forms of public improvements. Some of these bonds earn their own interest charges and so are not a burden on the taxpayers. This is the case with the bonds authorized to raise the money to build the subway and with those issued to build the large water front piers owned by the city and rented to the steamship lines. The interest on other bonds is provided by taxation of the property owners who are the direct beneficiaries of the improvements.

Tests of Safety

It must be anticipated that where there is such a multitude of communities, small and large, there will arise

many complications in determining the character of their securities as investments. As a result, also, there will be a wide range in their income yield. The business done in such obligations reaches enormous totals. It would prove highly interesting if it were possible to describe in one section a subject which could only be adequately dealt with in a whole book—the care that must be exercised by bankers who make a specialty of dealing in municipal obligations.

Before bidding for these bonds, such houses, through their attorneys, first assure themselves that the bonds have been legally issued, by which is meant that the electors authorizing the bonds were within the law. They must, in instances where the legality of the issue is not in doubt, satisfy themselves that the community can meet the taxation to pay for the issue. A growing settlement, in its ambition to anticipate the future too far ahead, may assume more obligations than it can carry, and as a result complications arise. Dealers in municipal bonds wish to avoid this danger even when it is a remote contingency. Money is a hard taskmaster. It has no sympathies. However, considering the total obligations of the multitude of our United States communities, estimated in the neighborhood of $10,000,000,000, they have had such an unusually satisfactory record as safe investments that investors need no other assurance from the bankers than that their legality is beyond question and the amount of the issue is within reasonable bounds.

Conditions which affect the standing and value of the bonds of national governments as well as of our own state governments are perhaps less legal and more political than is the case with municipal bonds. The chief points to investigate are:

1. The honesty, honor, and good faith of the people.

Have they the sense of duty and obligation in connection with their national debts?

2. The stability of the government. Are revolutions with repudiation of debt common and likely, or does a stable government prevail?

3. The resources of the country. Are the natural resources and industry of the people such as to warrant the amount of the debt which the state owes?

4. The fiscal policy of the government. Is it progressive and sound or wasteful?

5. The supply and demand for the bonds. Do they depend upon a natural or an artificially stimulated market for their sale?

TEST QUESTIONS

1. What is the pledge behind government bonds?
2. Explain how our National Banking law created an artificial demand for United States bonds.
3. What are consols?
4. How did Great Britain protect the holder of old government bonds in financing the great war?
5. What factors determine the interest rate which governments are required to pay? Illustrate.
6. What remedy has a bondholder in case a state repudiates the bond?
7. Why are permanent improvements frequently financed by means of bond issues?
8. How do governments raise the money with which to pay principal and interest?
9. What investigations do bond houses make regarding municipal issues?
10. What are the tests of a good government bond?

CHAPTER VIII

RAILROAD BONDS

Reasons for Variety

In the issuance of bonds, our railroads have been very prolific. They are possessed of an insatiable appetite for continuous supplies of new capital, sometimes for the logical purpose of providing for legitimate needs, and on other occasions to satisfy the desire for new worlds to conquer; and in giving their bonds suitable names the makers have almost exhausted the financial vocabulary. The average investor, unless thoroughly acquainted with the difference in bonds, will nowadays need a financial textbook to distinguish one railroad bond from another, and even then he may not be in a position to judge their relative and intrinsic values.

The railroads are not wholly to blame for this situation. As has been pointed out in a previous section, the early builders of our railroads never, for one moment, thought their properties would advance in value with the giant strides that have characterized their progress. Early in their history, by erring on the side of conservatism in pledging all their assets as collateral for loans, they made it impossible to mortgage their properties directly at a later time. Thus they were compelled to resort to other devices when it became necessary to borrow more money, and this accounts for the many varieties of bonds they have created.

Our great railroad systems are not the result of the original plans of their first builders; these men may have had a nebulous idea, at the beginning of their project, of a system from coast to coast, or covering a certain section of the country, but, realizing that all this would take time, they contented themselves with building their road in sections, allowing the future to take care of the logical development of their property.

While Henry Villard planned the Northern Pacific, other brains completed it. Harriman merely completed the unfinished Union Pacific. He moulded his great Pacific railroads out of what remained of the bankrupt Central Pacific, the construction of which the Government aided by large subsidies. James J. Hill never had any idea, when, for a small sum of money, he secured control of a jerkwater Minnesota railroad, that eventually it would develop into that marvelously rich transcontinental railroad—the Great Northern of today.

It is by a process of evolution that a railroad's capital and obligations grow. The one keeps pace with the other. Twenty years ago it never entered the head of the audacious and far-sighted Cassatt, president of the Pennsylvania Railroad, at the time when the road determined to build a terminus in New York City, that the Long Island Railroad would one day become absolutely necessary for its expansion. This has since proved to be the case, however, for the control of the Long Island has given the Pennsylvania a commanding position over the greater part of the profitable suburban traffic originating out of New York City—a business which alone is regarded as capable of taking care of the huge investment of over $100,000,000 which the Pennsylvania spent to secure a foothold in New York City.

If the histories of our other leading railroads were

carefully searched, similar cases would be found in which the roads have expanded in entirely different directions from those planned by their original builders. Their remarkable and rapid development has brought with it, quite naturally, some very unusual phases of financing. The main lines of all the principal railroads, through the enormous development of their traffic, long ago quickly outgrew the funds raised on their first mortgage bonds. Then arose the necessity of providing additional capital to take care of the increased business through some other form of bond against the very same property, although there already existed liens upon it. But as there was sufficient equity above the mortgage, this step was justified.

Classification of Bonds

A clear idea regarding the several classes of railroad bonds outstanding can be more easily formed by classifying them and giving a brief description of each. It should be borne in mind, however, that these definitions are not specific, but apply only generally to each class. There are so many peculiar features associated with railroad bonds that it would be impossible to treat specifically of each issue unless the bonds of each railroad were described. The description I shall give of each will at least suffice to fix its character in the reader's mind.

Railroad Mortgage Bonds

There are first mortgage bonds, second mortgage, third mortgage and, on some of our large railroad systems, even more mortgage bonds, each, in its turn, being secured by a lien on the property of the railroad in the sequence of its issue. To make it plain, it is best to describe in the beginning what is meant by a mortgage

bond. In character it is not different from a mortgage on a parcel of real estate, except in the respect that a real estate mortgage is usually owned by one individual, whereas there are hundreds and often thousands of investors interested in the same mortgage issued by a railroad or some other large corporation on its property. This is brought about as follows: First a mortgage for the amount of the loan is properly drawn up and recorded; then, in turn, it is registered with a responsible trust company which acts as a trustee. It is the mission of this trustee to safeguard the holders of the bonds by carefully scrutinizing the indentures of the mortgage, to ascertain and satisfy itself of their legality, and to see that the collateral described as securing the mortgage is all safely pledged and that there are no flaws.

The same trust company, or it may be another, acts as the registrar for the bonds. Its duty is to exercise proper supervision so that no more bonds than the amount called for by the mortgage are issued. The bankers who have taken the bonds pay to the trust company the price agreed upon and have the bonds authenticated by the registrar. Each bond is stamped or engraved with the statement that it is a certain fraction of a number of fractions, the whole together representing the amount of the mortgage. This is to prevent an overissue. The full terms of the mortgage are seldom engraved upon a bond. They are usually printed separately in the shape of a pamphlet; the actual mortgage is filed with the trustee. The printed copies are for the purpose of distribution among investors.

Bonds are issued in certain denominations against the mortgage. The denominations are usually $500, $1,000 or $5,000. However, there is nothing to prevent their being $10,000 or $20,000, or on the other hand as small

a figure as $100, as this is a matter largely left to the discretion of those bankers who arrange the bond issue. Custom however, with us, has largely favored $500 or $1,000 bonds. To distribute bonds more widely among smaller investors, bonds of $100 denomination have lately been increasing in popularity.

Each bond represents a direct interest in the mortgage for exactly the denomination it calls for; that is to say, the borrower has pledged certain collateral to guarantee the payment of the bond upon the expiration of a given period of time, together with a fixed per cent of interest each year, payable on demand, either annually, semi-annually, or quarterly.

The difficulty of borrowing considerable money from one or a few individuals in large transactions can be readily appreciated. Thus, to facilitate borrowing by large enterprises, modern finance has evolved the scheme of splitting up the loan in so many integral parts, each part constituting a bond. The Pennsylvania Railroad, for example, has outstanding against its main line, a first mortgage of $100,000,000. Now it is not possible to raise such a large sum from one individual; therefore, it is obtained through many, by the means of bonds, as has already been described.

The first mortgage bond, quite naturally, is the prime investment, yet from a point of security this does not always indicate that second, third, or even more mortgage bonds are not also safe investments, for the property underlying the first mortgage bonds may have multiplied in value so fast as to have accumulated an equity sufficiently large to allow the creation of second and subsequent mortgage bonds with perfect safety.

The Erie Railroad is an illustration. This immense railroad system has issued as many as five first mortgage

bonds against the same property, namely: The first, 4 per cent bonds, which matured in 1907; the second, 5 per cent bonds due in 1919; the third, 4½ per cent bonds due in 1923; the fourth, 5 per cent bonds due in 1929; and the fifth, 4 per cent bonds due in 1928. In citing the Erie Railroad as an illustration, I do not want it understood that I use it as expressing my opinion that these several first mortgage bonds are examples of the safest type of investments. Other railroads have not been as explicit in properly cataloging their bond issues as has the Erie, and this has resulted in much confusion to the average investor, who, as he reads of a first mortgage bond, is most likely to assume without further inquiry that it is literally as described, a first mortgage without any incumbrance ahead of it. Such is not always the case. Upon reading the description of the bond more closely, the investor is likely to run across something like the following, which is the exact phrasing taken from a well-known first mortgage railroad bond:

> The authorized issue of the first mortgage 5 per cent bonds is $3,000,000, the unissued $120,000 being reserved for the retirement of the .... bridge bonds.

Analyze this paragraph carefully and its meaning will become clear. These bonds, although called first mortgage bonds, are not exactly that. There is a security ahead of them in these bridge bonds which must first be satisfied. Without the bridge, the railroad would be cut in two parts like a dismembered body.

Here again is another description of a first mortgage bond which will cast further light on this important point. It concerns a first mortgage 6 per cent railroad bond:

> Amount authorized is $6,000,000; issued, $2,788,000, of which $1,288,000 was in exchange for prior lien bonds.

To be exact, what this means is that there are, ahead of the first mortgage 6 per cent bonds, other bonds already in existence and issued against a mortgage of $1,288,000, and out of the new $6,000,000 first mortgage bonds, enough bonds have been reserved in the treasury to replace the already existing bonds when they fall due.

The so-called general mortgage bond may not have other bonds ahead of it, but more often it will be found that such is the case. The purpose behind such a bond issue is to have some day, when all prior lien and branch line bonds have matured, but one kind of bond outstanding. These bonds are also issued in large amounts to provide a railroad's treasury with a reserve fund in securities on which to depend for additions and extensions as future development may demand.

Consolidated and Refunding Bonds

The *consolidated bond* is a bond wherein are merged a number of bonds previously issued. A railroad may have created in former years a series of bonds directly secured by its physical assets. Some of those bonds may have been placed when interest rates were high, while the others were sold in later years at a time when it was much easier to borrow capital. The railroads, to escape this situation, evolved what is known as the consolidated bond. This was done through the making of a general, or as it is called, a blanket mortgage, providing that amounts of such consolidated bonds be retained by the road to equal the bonds already outstanding on the property, so as to replace them when they fall due. In this manner the railroads were in a position to obtain additional funds without pledging additional collateral.

Almost like these are the *refunding bonds*. Originally, they sprang into existence as a means whereby the rail-

roads could refund high-interest-bearing bonds which, when the road was first building, it was necessary to sell to tempt capital into the project. It was the practice in the early days of railroad building to make a loan for fifty years. Usually the interest paid was 6 per cent; sometimes it was as high as 7 per cent. What was further to the detriment of these early loans, was that no calling provisions were embodied in the mortgage; therefore these bonds had to run until their expiration. Fifty years almost covers the longest period of development in our steam railroads. It takes us back to the very beginning of our Civil War, a period when the construction of railroads was still in its early stages. In consequence there have matured and will mature, within the next decade, a number of these early issues of railroad bonds. It is to take up these bonds as fast as they mature, and to secure additional capital as found necessary, that refunding bonds bearing a lower rate of interest have been and are being issued.

Extension and Divisional Bonds

As its name implies, an *extension bond* is a bond created for the purpose of raising funds to extend the railroad. Usually the extension is pledged to secure the bonds. Such bonds may be named first mortgage extension bonds, or merely extension bonds. A *divisional bond* is almost exactly the same, it being an obligation of a division on a railroad distinct from the rest of the system; so also a *branch line bond.* There are many such bonds in existence.

Unifying and Adjustment Bonds

Among the bonds of some of our railroads will be discovered what are called *unifying bonds,* meaning bonds

created to unify in one issue a number of underlying bonds and to reduce the interest, which differs on the several issues, into one rate. Other railroads call a bond similar in purpose an *adjustment bond,* implying that with the issue the intention has been to adjust the bonded debt into one class and have one given interest rate.

Lien Bonds

A *lien bond* denotes the obligation in accordance with its number or name; for example, a *first lien* bond is really the direct mortgage bond, although some railroads call this particular issue a *prior lien,* implying it has preferences over all other liens or bonds outstanding. A *second lien* bond is like a second mortgage. A *third lien* follows in sequence and so forth. Quite naturally it may be assumed that each lien bond on the same collateral has behind it a lesser degree of security than the lien ahead of it.

Often a railroad plans improvements on a certain section of the road already covered by a mortgage, and raises the capital by selling what is known as an *improvement bond*—a bond presumably secured by the improvements contemplated, although in reality subject to bonds already in existence, inasmuch as the improvements can have little value if detached from the underlying structure.

The railroads likewise have found it convenient, when they wish to expand, to acquire other roads. This is often a much cheaper method than to construct a new line in the same territory. This has brought into existence what are called *purchase line bonds,* the proceeds of which enable the railroad to secure control of a rival or a feeder. These bonds usually are a lien on the acquired road, subject sometimes to bonds that may be

already pledged against it. There is also the *construction bond,* a security issued for capital to undertake new construction. There is the *purchase money bond,* akin to the purchase line bond, only a little broader in scope in that it may mean that the money can be used to purchase something else than another road.

There is the *tax exempt bond,* so named because it is free from taxation by state or city, not through any legislative provision, but by the mere fact that the railroad itself has agreed in its mortgage to take care of all the taxes; or it may, by legislation, be freed from all taxes in certain states. Here it might be mentioned that in some states, in order to increase the number of desirable securities in which the funds of its savings banks may be safely invested, tax-free provisions are held out and also provisions whereby certain types of bonds become legal for investment for the funds of such institutions. This explains the phrase so frequently occurring in the circulars of bond dealers, "legal investments in such and such states."

Serial bonds are like lien bonds, as, for example, the Chicago, Milwaukee & St. Paul general mortgage bonds. The total issue is $39,978,000, and of these bonds a little over $31,000,000 comprise the Series A bonds and the remainder are the Series B bonds. A railroad finds it sometimes convenient to split a large bond issue into different series and name the several issues in this manner to give them a distinct identity and maturity.

Terminal Bonds

The *terminal bond* is usually secured by the main station property owned by a road. This property, consisting of valuable real estate, is at least nowadays kept distinct from all other assets and used as a collateral to

secure separate loans. This idea is further applied to other property owned by a railroad, not directly associated with its main business, as in the case of the road's harbor or water business. A number of our roads, for the development of this traffic, have raised money for the purchase of ferry boats, lighters, vessels, and tug boats, all of which it pledges for separate loans, and each bond is specified under a separate name. So also with *bridge bonds,* directly secured by certain bridges a road has built. *Tunnel bonds* also are issued in the same way.

Miscellaneous Bonds

A *joint bond* is usually a bond associated with some other bond in a particular lien. An *underlying bond* is named thus to distinguish it from another bond on the same property. A *redeemable bond* implies that the issuing company reserves the privilege of calling upon the holder for the return of the bond, with accrued interest, at a specified price.

There are also issued by the railroads, *canal bonds, timber bonds, coal bonds, land grant bonds,* and so forth, each being against particular property, and in many instances they are valuable. Take, for instance, the Reading, the Lackawanna, the Delaware & Hudson, the Jersey Central, and the Lehigh Valley; their coal properties are among the most valuable of their entire assets, as are also the land grants of the Southern Pacific, the Union Pacific, and the Canadian Pacific. The land, originally granted these roads by their respective governments to encourage their development, has increased enormously in value through the transportation facilities which have been accorded them, and through the influx of population.

There is also what is styled a *reorganization bond,* an

obligation issued at the time when a financially embarrassed railroad was reorganized and again put on its feet. There is the *stamped bond,* stamped for some reason or other. This is a rare bond, the Atchison being one of the very few railroads having a bond of this description. Then there is the *registered bond,* taking its name from the privilege accorded the holder to register his name and address and the amount of his bonds on the books of a railroad as a protection against loss or theft of his bonds. When this is done the bonds can pass from one holder to another only by a transfer on the books, for bonds to be quickly negotiable are made out simply to bearer.

Sinking fund bonds derive their name from a provision that the issuing company agrees to redeem each year a specified number until they are all automatically retired. Sometimes a railroad carries the redeemed bonds in its own treasury, using the coupons to help pay the interest on the outstanding bonds, or it may agree in the mortgage to set aside each year a certain per cent of the earnings as a sinking fund to retire the bonds automatically when due, the interest on this money helping to defray the interest on the bonds.

There are also *guaranteed railroad bonds,* issued against controlled, leased, or absorbed lines, and guaranteed by the controlling lines. Sometimes these bonds are guaranteed both as to interest and principal, meaning that if there is a default the guarantor will reimburse the holders in full. Some of these bonds are guaranteed only as to interest, as in the case of the bonds of the Western Pacific, the interest on the first mortgage 5 per cent bonds being guaranteed by the Denver & Rio Grande, but not the principal.

Equipment Bonds

A class of railroad bond which in late years has jumped into great popularity is the *equipment bond.* Nearly every railroad has one or more such issues, some of the larger roads having many. These bonds are secured by the rolling stock, consisting of locomotives, passenger coaches, and freight cars. It can easily be inferred what constitutes their safety in the opinion of investors when it is taken into account that without equipment a railroad is useless and its tracks would soon consist of two streaks of rust.

Railroads have gone into receivers' hands, suspending payment of interest on a portion, if not all, of their bonds until they could be refinanced, but rarely have even receivers avoided paying promptly the interest on equipment bonds, realizing the absolute necessity of retaining the equipment. Being easily movable, this equipment gives the bondholders a conveniently salable collateral if they should have to take it over to satisfy their loan, and then it would not be possible to operate the road unless other equipment was purchased.

TEST QUESTIONS

1. Why are railroads, as a rule, heavy borrowers?
2. Show how the unexpected development of certain railroads accounts in part for the multiplicity of railroad bond issues.
3. Explain how mortgage bonds are issued on railroad property.
4. Is a mortgage bond always a first lien upon property? Explain.
5. What is the meaning of a consolidated bond?
6. How does a refunding bond differ from a consolidated bond?

7. Describe extension and divisional bonds.

8. When are unifying and adjustment bonds used?

9. What are serial bonds? Why are they issued?

10. How do guaranteed railroad bonds arise? Describe the provisions of at least one such series of bonds.

11. What are equipment bonds? Why are they often attractive for investment?

12. Enumerate the different kinds of railroad bonds.

13. What are the chief precautions to be observed in reading the provisions of a railroad bond? Illustrate.

14. What factors determine the rate of interest of a railroad bond?

CHAPTER IX

PUBLIC SERVICE CORPORATION BONDS

Growth of Public Service Corporations

There is a class of corporations owing their existence to special privileges granted by communities to furnish a service to the people, providing greater comforts and making inter-communication more convenient. Such corporations are known as public utility or public service companies, and comprise those engaged in supplying transportation facilities, gas, electric light, heat, water, and power. In one field only are they analogous to other corporations, and that is in transportation. In all other fields these corporations belong distinctly to an individual class. The street car lines provide a convenient service to a congested community, allowing cheap and quick travel from one place to another. They supply on a smaller scale the service the steam railroads give in covering greater distances.

But only in recent years have public service corporations come to occupy their present position of prominence and importance as a field for the profitable exploitation of capital. It might also be stated that the golden age, if there can be said to be such in the history of corporations, came to them with the advent of electricity, that subtle force which introduced an economic revolution in low operating cost. In the days antedating steam and electricity, when horse cars were the mode of transporta-

tion, the service was so slow there was little profit in the business and next to none if the capitalization was large. Nor was there much improvement with the change from horse cars to cars propelled by cable. While it was a step forward to haul cars in trains of two or more coupled to a cable car, the coal required to provide the power to run the cable ate up almost all that was saved by dispensing with horse power. Likewise breakdowns occurred so frequently with cable power as to make that an expensive item in the operating cost. All these disadvantages, however, were finally overcome with the advent of the first electric trolley car. The cost of producing power was reduced to a minimum. It made possible transportation facilities to serve remote sections of large cities. It gave to the smallest towns a street car service —a direct stimulus to growth. But what may be regarded as the most phenomenal development has been the upbuilding of interurban traffic, which is today making electrical roads keen and aggressive competitors of the steam roads. All this is possible because it costs less to operate the lines; the service is maintained at low cost and is more efficient.

Electric Interurban Lines

In what a strong position electric interurban transportation is entrenched in this country will be readily appreciated when it is known that it is possible now to start in a trolley car from New York City and travel across the whole state. Interurban electric roads practically parallel the New York Central Railroad all the way from New York to Buffalo. In fact they have become such keen aggressors for the short-haul business, which, by the way, is the most profitable traffic, as to compel the big railroads in self-defense to absorb the

principal electric interurban lines in order to maintain their dominating position. The New York, New Haven & Hartford was actually forced to take under its wing, through a separate corporation, the interurban lines touching every place of importance in Connecticut and Massachusetts, or face the penalty of heavy inroads upon its passenger and light freight business. The management of the Southern Pacific, seeing far ahead the possible encroachment the electric roads in Southern California might make upon its earnings, did not wait until this stage was reached, but secured control of all the important lines at the first opportunity presenting itself. Today a traveler can, by means of these long-distance trolley lines, reach almost every part of Ohio. In Indiana and the larger portions of Illinois and Pennsylvania similar conditions prevail.

Nowadays a person may obtain a berth in a trolley sleeping car in the evening at Dayton, Ohio, and be in Indianapolis early the next morning. He may travel in similar comfort from Peoria to St. Louis over the Illinois Traction lines. All this but gives a faint idea of the remarkable evolution electric power has brought about in transportation. There are prophets, whose claims are by no means disbelieved, who say that it will not be long before the monster steam engines used now to haul long trains of passenger coaches and freight cars will be displaced and become antiquated and a memory, as are the old horse cars of twenty years ago. That this is the tendency is borne out by the present use of large electrical Westinghouse motors by some railroads, notably the New York Central and New Haven. The experiment is even now being tested of propelling cars with electric storage batteries, so far with some measure of success. If this new power is perfected, even greater economy in

operation will be introduced, dispensing with trolley wires and costly power-generating stations which it is now absolutely necessary to maintain. The interurban electric roads have another important advantage over their older rivals, the steam roads, in that the motorman, by simply turning his controller, can stop for passengers anywhere. The steam roads can stop only at designated stations according to schedule.

Financial Importance

That huge amounts of capital have gone into these projects occasions no surprise, nor is it strange that the public has shown such favor towards public service corporation securities, especially those of the more conservative type. Yet the evolution from one form of motive power to another has brought some strange changes in its train. In New York City, the old lines, already overcapitalized, were compelled, with each change or step forward in economy of operation, to increase their capital burden, with the result that in the end they collapsed, in spite of the fact that in a city like New York, where there is such a density in population, the revenues derived from carrying passengers from one part of the city to another should be exceedingly profitable. By adding obligation upon obligation to their capital, the New York traction financiers made it obligatory on some of the lines to earn profits on as much as $1,000,000 capital per mile and all on nickel fares. Small wonder that the end was bankruptcy and such a tangled state of affairs that a long period passed before the New York surface lines were successfully extricated from their financial embarrassment. Charles T. Yerkes brought about a similar state of affairs in the West Side and North Side lines in Chicago, which required years to

readjust, and only after disastrous losses were sustained by thousands of shareholders. Philadelphia is similarly afflicted with an overcapitalized traction system.

Happily, these cases are only the direct results of the desire of the interests in control to fatten their fortunes at the expense of the public and investors. Where there is a normal capitalization and the properties are under the control of honest and conservative management, they have proved for their shareholders a more than satisfactory source of revenue, and the secured obligations, like the bonds, have shown themselves to be among the safest forms of investment.

Judging Public Utility Investments

FRANCHISES

But in judging this class of investments, there are a number of important factors which should be taken into consideration. First and foremost is the franchise under which the public service corporation operates. Especially is this of importance where the bonds are concerned. The franchise is the keynote of their success in business. We have seen how unfortunately it sometimes turns out for a public service corporation when its franchise expires, as in the case of the traction companies serving the cities of Chicago and Cleveland, and to a less degree in Toledo and Detroit. Public utility corporations unfortunately are in a position to become the shining target for ambitious politicians, who, when they find they cannot win votes by any other propaganda, as a last resort turn upon these corporations in their own community. By making it appear that the corporations are in business to oppress the people, they endeavor to arouse an agitation for public ownership and operation.

It is a good propaganda to win votes, but in many cities where this scheme has been tried it has proved a flat failure. And a failure it will continue to be until the average politician who feeds at the public crib develops capacity in business. As long as these clashes take place, the length of a company's franchise is an all-important question in properly appraising its securities for investment and speculative purposes.

If the franchise expires after a company's outstanding bonds mature, some authorities contend that it is a safe investment, providing the net earnings indicate a sufficient margin in excess of the fixed interest charges. In this contention they are partly correct, since, whether the corporation redeems its bonds or not, the expiring loan in some manner must be paid. In all cases it is safer to provide a sinking fund for the redemption of bonds issued on limited franchises.

CHARACTER OF MANAGEMENT

A corporation's management is, in my opinion, of equal importance. If that management follows a policy of catering to public opinion and bends every energy to supply its products to the community at a reasonable charge, after allowing for a fair profit, the probabilities are that the community and the corporation will exist in peace. It has been demonstrated in a number of instances that such wisely managed properties have had public opinion behind them when attacked by designing politicians.

Some public service corporations are very fortunate in owning perpetual franchises. This places them in an unassailable position. They do not face the danger of a possible contest over the renewal of their privileges. The only danger that may confront them is that the com-

munity may grant a rival company another franchise, but this does not always turn out to the public's advantage. This is at least true as far as concerns the use of the telephone. When it becomes necessary to use rival telephones to give a satisfactory service, it is very seldom profitable. There is no advantage where there are two charges without obtaining any additional benefit, when one service can do the work equally well. Generally speaking, this advantage affects equally all public service corporations.

There is one development in the recent financing of public service corporations which should not be overlooked—the tendency towards conservatism. In this, those directly concerned in promoting them have shown that they have absorbed a lesson from past experience. They now build their structures on firmer foundations. New bonds issued for improvements are on a more reasonable basis. In many cases it is stipulated that additional bonds shall not be sold above from 75 to 85 per cent of the actual cost of additions and extensions, thus creating from the very beginning a substantial equity above the bonded debt. Where it is possible, the builders of interurban trolley lines secure private rights of ways to overcome difficulties regarding franchises.

NATURE OF REGULATION

The states also have realized the wisdom of cultivating capital rather than discouraging it from entering upon projects designed to serve the public convenience. Public service commissions have been created to deal intelligently with this problem. These commissions are vested with the power to allow the corporations under their control to increase their capital as well as to refuse the privilege when it appears that the necessity for more

capital does not really exist. It is also within the power of these boards to refuse franchises when, in their opinion, a rival corporation, instead of benefiting a community, adds only a burden. While, of course, this system of control has some disadvantages, the general good they have thus far accomplished outweighs the drawbacks. At least it shows a desire on the part of the states to take the public utility corporations out of politics, which is at the bottom of most of the friction between corporations and communities.

Safety in Public Utility Bonds

However, it cannot be denied that, for some years, the public service corporations have as a class made such an excellent showing as consistent revenue producers, that they have become popular with the investment public. The panic of 1907 and the year of depression which followed gave them an excellent opportunity to demonstrate their stability. A great many of the companies turned this hard corner with increased earnings, whereas the earnings of corporations operating in other fields showed a sharp falling off.

There is a logical explanation for this. It must be borne in mind that the public can save little on light, heat, or power. It must ride to and from business. What is lost by a smaller average consumption is far more than made up by the increased demands of a growing population. Statistics prove that. The competition from automobile and so-called "jitney" traffic has recently made itself felt on the earnings of certain street railway companies. The future of this kind of competition is still problematical, but the experience thus far shows that

other methods of transportation may some day make themselves felt in a serious manner.

Then, also, well-managed gas, heat, and electric light corporations have carried on a campaign of education, showing their patrons how their service may be used in other directions, thus increasing their patronage. Electric ranges and gas stoves have proved splendid drummers for business. The use of electricity for advertising has also been a source of considerably increased revenues. Electric power plants, as well as plants generating power from water, have made a permanent place for themselves wholly by the economy they have introduced in the cost of power.

All these factors are worthy of consideration so far as they explain the influences behind these corporations working for their success. As they are in a business of providing actual necessities, they are indispensable to a community. The investor, therefore, is assured that the business has, at least, solid ground as its foundation.

When electricity was first discovered, it raised the fear that the end of gas as a source of light had been reached, but this apprehension has proved unfounded. More gas is consumed today than ever before and the consumption is likely to continue to increase. While interurban electric roads have done a large business and are aggressive competitors of the steam roads, it is nevertheless a fact, as is shown by their increased gross revenues reported to the Interstate Commerce Commission, that the railroads are doing a larger business than ever before. The hydro-electric power plants have by no means cut into the output of the coal mines. In fact, our constant growth in population can be relied upon to use all the new means available for creating power, light, transportation, and heat.

Concentration and Integration

In smaller cities frequently the same company controls the gas and electric light plants and the street railway system. This integration and combination prevents competition and makes possible development along safe and sane business lines.

Another point worthy of comment in this connection is the tendency towards concentration of management of public service corporations into holding companies, which operate the public utilities in more than one city. A number of such corporations have been organized and as a general rule have been successful. At least one of these companies controlling a large number of subsidiary companies operating in cities has earned exceptional profits for its shareholders.

These holding companies, unlike their namesakes operating in the railroad and industrial field, are virtually immune from the restrictions placed by the Sherman law over all interstate commerce, or business transacted between different states. Their business is all concentrated in the communities which their plants supply. Only when they control electric roads crossing two states are they subject to the law Congress enacted to control trusts from restraining free competition.

As it is compulsory in nearly all states for public service corporations to publish detailed statements of earnings, the purchasers of these securities have little difficulty in determining the investment opportunities and speculative possibilities in their bonds and shares.

The truth is that there is more compulsory publicity with this class of corporations than with any other. The reason is that the public, by whose will they exist, have more than an ordinary interest in their behavior and success.

TEST QUESTIONS

1. What is a public service corporation?
2. What inventions have made possible the extensive public utility services of today?
3. Describe the development of electric interurban transportation.
4. What three main factors should be considered in judging public utility investments?
5. Explain why the stability of public service corporation bonds is generally unaffected by panics.
6. Explain the tendency toward concentration and integration in the public utility business.
7. To what degree is publicity enforced in the public utility field? What value is this to the investor in such bonds?

CHAPTER X

MISCELLANEOUS BONDS AND SECURITIES

There still remain other means by aid of which corporations manage to borrow money, but they do not involve the necessity of pledging any tangible assets, as is the case with the different bonds described in the previous section.

It is not by their names that these bonds may be known, for they, too, are known as bonds. It is by their character that they should be distinguished, by which I mean that the investor ought to look carefully into them, for, since they masquerade under the general name of a bond, there is always the possibility of acquiring a security without any intrinsic value behind it, which fact is not discovered until something goes wrong.

INCOME BONDS

Prominent among such securities is the income bond. To the uninitiated investor, the word "income" has a confidence-inspiring ring to it, but in reality the so-called income bond only pledges the corporation to pay the promised interest when it is earned, and not otherwise. A case in point where such a bond proved no better investment than a non-producing stock, was that of the income mortgage bonds of the Central Railroad of Georgia, of which there are three—the first, second, and third preferred mortgage income bonds. On the second and third income bonds, the interest was not paid for

some years, and finally, in exasperation, the holders of the second income bonds brought suit to force the company to pay them their interest first before diverting the net profits to improvements. While they won their case, their predicament during the years when no returns were received conveys its own lesson of the insecurity that lurks behind an investment in income bonds. Some stocks are preferable to income bonds. Such bonds should be thoroughly investigated before being accepted as a desirable investment; especially should the profits the company is earning and has earned over a period of years be looked into, for it is from this source the payments of the interest on the bonds are derived.

Collateral Bonds

There is also the collateral bond, not differing very much from the income bond, except technically. Bonds of this character have as their security stocks or bonds in other corporations. There are many of this class of bonds in existence. They are the outgrowth of the tendency in recent years of the strong corporation to absorb the business of rival corporations, and they are also the direct outgrowth of the holding-company plan. The holding company is a form of corporation which is not itself directly engaged in business, but which holds the controlling stocks and bonds of actual operating corporations; against the ownership of these securities they issue their own stocks and bonds. It is these holding companies that have acquired the name of trusts.

In nearly every important industry may be found the holding corporation. To mention a few, there are the American Tobacco Company, the International Harvester Company, the Interborough-Metropolitan, the Rock

Island Company, the American Chicle Company, and the International Mercantile Marine, all corporations owning the majority of the securities of other corporations. These are only a few of them.

Some of these holding corporations have issued bonds, pledging for their security either the stocks or bonds of the subsidiary corporations. They are the collateral bonds. Other corporations which do not exactly come within the definition of a holding company also issue such bonds. For this interest they depend upon the earnings or income received from other underlying securities.

An applicable illustration of what collateral bonds are is found in the Interborough-Metropolitan 4½ per cent collateral bonds. For each unit of two hundred dollars, there is pledged one share of stock, with a par value of $100 of the Interborough Rapid Transit Company, which operates the Subway in New York City. This underlying company's dividend each year is used to pay the 4½ per cent interest on the collateral bonds.

These bonds differ from income bonds only in that their interest must be paid. This is an implied obligation. The interest is paid as long as the collateral securities back of the bonds earn a sufficient income. When this income falls off and a default takes place, the holders of such bonds may take over the collateral by due process of law. They then find themselves in the position of falling heir to other securities, either as stockholders or as bondholders in the underlying corporations. The fact that the securities were unable to earn enough to pay their interest, in most instances, does not improve the situation much. From a standpoint of safety, the majority of collateral bonds, on a final analysis, cannot be

ranked as suitable investments for anyone dependent upon income and security.

It may well be said for some of these bonds that they are entitled only to the designation of bonds to distinguish them from stocks, in that they place their holders in the category of creditors of a corporation, whereas a stockholder can only participate in the profits when there are any to disburse. The one must be paid to maintain the corporation's solvency; the other must take its chances.

Debenture Bonds

Not infrequently a strong corporation employs its credit as the sole security for an issue of bonds. At other times, in addition to pledging its credit, other collateral may be added. Where such bonds are issued they are termed debenture bonds. In reality they are but a note like the plain merchant's note, such as banks discount every day without calling upon the borrower for any other security than his name affixed to his note, accepting his credit rating as sufficient guarantee that the note will be paid when it matures. If the bank is not wholly satisfied with the standing of the maker of the note, it will demand, for added security, that the note be endorsed by one or more persons satisfactory to the bank. In the debenture bonds, a corporation, instead of going to the banks for a loan, approaches investors whom it is prepared to pay a fixed rate of interest for a term of years, for the use of their capital. Such bonds should be appraised by the rule applied to a merchant's note—on the credit standing of the maker, and this is usually determined by the periodical statements of earnings issued, indicating the profits in excess of all operating costs.

Convertible Bonds

In the convertible bond modern finance has evolved a device to tempt forth the capital of investors who, while still wishing to maintain their position as creditors of a corporation, desire a speculative opportunity to share in the future prosperity of the business. The convertible bond serves this end. Such bonds carry a call upon another security at a given price, usually considerably in excess of the market value at the time the bonds are issued. When the convertible price is reached, the holders of the bond may exercise the privilege of exchanging their bonds into the other security. The convertible bonds of the Union Pacific issued some years ago brought a round profit to those who held them until the company's shares reached their conversion price. The Atchison is another road where this happened. Among the industrial corporations a striking example is the American Telephone & Telegraph Company, whose shares advanced to where it became profitable for the holders of an early issue of convertible bonds to exchange them for the company's stock, which was receiving 8 per cent in dividend, in contrast to the smaller interest received from the bonds.

Quite a number of our corporations have resorted to convertible bonds as an expedient to make loans, but the successes attendant upon some of these issues by no means mark these securities with the character of unusual investments. On not a few of this class of bonds, the convertible privileges represent a forlorn hope that an opportunity of making a profitable exchange may present itself. Seldom are there any assets of a tangible character pledged behind the convertible bond. If such exist, their character is stipulated in the mortgage. Such

bonds are considered as coming within a semi-speculative class of investments, and for that reason they should be carefully scrutinized by investors. Their safety largely depends upon the issuing company's continued prosperity.

With a description of a few more securities included in the definition of bonds of a general character, I shall close this section.

Short-Term Notes

The most important of the securities which still remain to be described is the short-term note—a useful financial expedient in periods when there is a scarcity of capital and, because of this condition, exacting interest rates. To meet this situation, corporations borrow capital for their pressing needs for only a short term of years by means of notes running for a brief period, and agree to pay interest on them in accordance with the current money rate. In hard times it would be folly for a corporation to make a long-term loan for two reasons. One is that such a loan, at the current high rates, would prove unusually expensive if spread over a long time, and the other and more important reason is the disastrous influence likely to follow in depressing the price of the outstanding bonds which a corporation has sold when there was a plethora of money and interest rates were low.

If the holder of a 4 per cent bond having still ten years to run, saw an opportunity to replace it for a 5 per cent bond of his corporation which would not mature before his security matured, the natural inclination would be to exchange the one for the other. It is to equalize the interest with the bonds already outstanding, that short-term notes are employed. This class of securi-

ties crowd upon the market in panic years and in the years of depression which follow. Other securities may mature in these abnormal periods which must be taken care of, or capital may be needed for other purposes.

The late H. H. Rogers, rich as he was, found himself in a tight corner in the panic of 1907. He was just finishing the Virginian Railroad and needed a few million dollars hurriedly. It was out of question to raise this money by offering first mortgage bonds, especially on an incompleted railroad. The banks were not lending any money except on gilt-edged collateral. Mr. Rogers could not allow his cherished ambition to fail in this critical period without suffering a great loss in prestige. He was forced to issue short-term notes carrying 6 per cent interest and had to pledge to insure their security a large part of his investments in Standard Oil, and shares in banks and gas companies—in all over $18,000,000, the income on which provided for the interest on the notes several times over. Mr. Rogers' experience illustrates that periods are reached in nearly every rich man's career when borrowing money is not an easy matter.

Nor do corporations escape the exactions placed upon them by hard times. Municipalities enjoying in normal times the best of credit, are forced to pay large interest to borrow what money they need. A case in point is that of the city of New York, which at one time, only a few years previous to the 1907 panic, readily sold 3½ per cent bonds at a premium, but was forced to raise its interest rate to 4½ per cent.

By the use of short-term notes corporations finance their needs to bridge a period of tight money, depending upon their ability with the return of easier conditions to refund these obligations with a security which calls for a more reasonable interest rate. Most of the large rail-

roads and industrial corporations have found these short-term obligations a great convenience in trying times.

Trust Receipts

These are receipts issued by a trust company in return for securities placed with them as custodians. These receipts, like bonds, are issued in a negotiable form so that dealings in them can be carried on readily. There are voting trust receipts, a security protected by another security for which a voting trust has been formed, consisting of a number of directors. The scheme of the voting trust is to maintain the control of a corporation in certain hands for a prescribed length of time in order to insure one continued management of its affairs. The idea when properly applied may turn to a corporation's advantage, but sometimes it is used to perpetuate, for a number of years, control in certain hands without the necessity of making heavy investments, which would be required were not all the stock in a voting trust.

Interim Certificates

Interim certificates are merely promises to deliver bonds or other securities when they are ready for distribution and which may not be engraved and all signed by the proper officers when they are first offered to the public. In their place, certificates, called interim certificates, issued to bearer, are given to be exchanged when the other securities are ready for delivery.

Certificates of Deposit

Last, but not least in importance, is the certificate of deposit, which, as its name indicates, identifies the holder as having deposited at a certain place the securities described in the certificate. These certificates of deposits

are the outgrowth of the reorganizations of embarrassed corporations. When this unfortunate situation is reached, the more important holders of the securities form a committee for the mutual protection of all the holders of the same class of securities. An agreement is drawn up by attorneys, vesting this committee with certain powers to effect a reorganization, and a call is issued to the security holders to deposit their security with a designated trust company. In signing this agreement and upon deposit of his security, the holder appoints the committee his agent or attorney to do all the things stipulated in the agreement and agrees to share ratably all the expenses incurred by the committee. The trust company which acts as a depository issues a certificate of deposit, usually to bearer, identifying the holder as the true owner of the securities which have been deposited with it. Then, when a reorganization has been brought about, whatever new securities are authorized in the place of the old ones, are exchanged for these certificates of deposit after all expenses of the committee have been paid.

Certificates of deposit may apply to stocks as well as to bonds. They are merely mentioned here as a security which, applying to bonds, may as well be described now as later. As their very character shows an interest in a bankrupt corporation, there is hardly any necessity to discuss their investment value. That depends entirely upon the security itself which is pledged. If a first mortgage bond, then there may be behind it more than enough property to protect the creditor in full, including the accrued interest. Sometimes this does not appear to be the case, as with the first mortgage bonds of the insolvent Wabash-Pittsburg Terminal Railroad. The holders of these bonds were compelled to fight to avoid having

to take an inferior security in return for the one they held. The certificate of deposit, in our scheme of bringing to life once more our prostrate corporations, is credited chiefly to the ingenuity of J. P. Morgan, the greatest of reorganizers.

Commercial Paper

With a brief mention of commercial paper we shall have disposed of this security. Essentially forming an investment more for banks than individuals, it will hardly interest the student of finance unless he is shaping his education towards a banking career. The degrees of safety in commercial paper vary with the standing of the maker. Prime commercial paper is the note with nothing but the maker's name. With each endorsement are indicated the exactions placed upon the borrowers by the banks before they will make the loan. Yet this is not always true. The paper of some large corporations, to make it readily salable through note brokers, will carry a number of endorsements.

TEST QUESTIONS

1. Explain the nature of an income bond.
2. What is a collateral bond? How does it differ from an income bond?
3. What is the relative value of a collateral bond for investment purposes?
4. Describe a debenture bond. When and how are such bonds issued?
5. What is a convertible bond? Describe its merits as an investment proposition.
6. How are short-term notes used in financing enterprises?
7. What are trust receipts?

8. Explain the nature and use of interim certificates.

9. How and when do certificates of deposit arise?

10. Why is commercial paper a form of investment for banks rather than for individuals?

11. Under what conditions are short-term notes a desirable investment? When not?

12. What are the tests of a good investment in bonds?

CHAPTER XI

IRRIGATION BONDS

History of Irrigation Bonds

It is the history of every virile and progressive nation that in time all its land capable of subjugation to the plow becomes occupied. We are in such a period now. Our principal reservations, consisting of natural tillable land originally set aside for the Indians, whom the country has considered its wards, have all been opened for settlement, so that even this pre-empted land is now largely occupied by white settlers.

But our population continues to grow. With its growth there has arisen a serious need of our arid lands for agricultural purposes. Of such land we have enormous stretches. Efforts are now being made to reclaim these lands by bringing water to them by artificial means. Not only are we considering means by which the parched sands of our various desert areas may be made to blossom, but we are also hard at work planning how our swamp lands may be redeemed for agricultural exploitation by draining them of their stagnant pools and bayous.

Our population has grown so large that every square foot of ground that can be reclaimed by artificial methods is worth saving. It matters not whether this can be accomplished by irrigation or by drainage.

Our Government early recognized the possibility of reclaiming its deserts by harnessing mountain streams

and turning their waters to beneficial use. The Government has already spent millions of dollars in building giant reservoirs for the storage of water, and ditches to carry this water to lands which needed it in order to become productive.

Irrigation is by no means a modern science. It is almost as old as the human race itself. The ancient Egyptians of the Nile Valley depended upon it as early as in the time of Ptolemy and had developed it to such a point that their country was virtually the granary of the ancient world. With us, however, irrigation is a somewhat new problem, as it was not necessary for us to go to the length of artificially watering land while there yet remained open for settlement plenty of land well-watered by nature.

Private capital also, always keenly alive to opportunities for profit, has seen opportunities in the work of reclaiming our large arid land areas. What the Government could do, capital felt it could do also. The result has been that within the past few years a considerable number of privately organized irrigation projects have sprung up, capital for which has been raised by the sale of irrigation bonds. As this class of bonds constitutes by no means a seasoned investment, it should be most carefully considered before being selected as a profitable and safe medium through which to make investments.

Already a large number of these projects have failed because the men back of them were inexperienced in this particular field and allowed their optimism to becloud their better judgment. It requires more than the mere building of reservoirs and ditches to assure the financial success of an irrigation project. Not only is a continual supply of water requisite but also the certainty of a sufficient number of farmers to settle the land. Likewise,

these farmers must know how to cultivate successfully land supplied with water by artificial means, as the method of farming irrigated lands is wholly distinct from that followed on lands nourished by rainfall.

Classes of Irrigation Bonds

As irrigation bonds are a distinctively new security, it is interesting to know on what they are based and how they are issued. Broadly speaking there are four general classes of such bonds:

1. Private corporation bonds.
2. Corporation "Carey Act" bonds.
3. Municipal district irrigation bonds.
4. United States irrigation bonds issued as part of the reclamation service.

Private Corporation Bonds

The capitalists behind private corporation bonds aim to raise the money required to construct their reservoirs, ditches, and canals by the sale of first mortgage irrigation bonds. They incorporate a company which is to own all the facilities for storing the water and carrying it to the land. They stake out the acreage for which their company is to supply water. They then sell to newcomers the water rights for a fixed sum per acre. To make the illustration clearer I will assume that they ask $40 an acre for their water rights. This gives the settlers perpetual rights to the use of a certain quantity of water for their land each season. To secure these water rights the farmer gives a mortgage on his land. These mortgages are the collateral pledged to secure the holders of the irrigation bonds, and as the farmers pay off their mortgages in easy installments, the bonds are retired serially at different maturities. The stockholders in

these companies expect their profits from what is left after the bonded debt is cleaned up.

All this of course is feasible. Experiments have proved that the chemical elements in desert land, when properly watered, give the ground a richness and fertility which make these lands prolific producers of certain agricultural products. The Twin Falls section of Idaho is a very excellent example of the large measure of success possible from the application of intelligent irrigation. Not only has this section of the state prospered in an exceptional degree by harnessing the mountain streams and diverting their waters to the dry lands where they are most wanted, but, as a direct result of the large agricultural population thus brought in, a number of prosperous towns have sprung up which would never have existed under any other conditions.

But the mere presence of water in arid countries is not always a guarantee that dependence can be placed upon a sufficient supply in dry seasons. Desert streams are likely to thin out at the most critical time. Herein lies one danger likely to threaten an irrigation project. Skilled engineers of long experience are necessary to gauge the quantity of the water supply, to build reservoirs in the right places, to construct economically the necessary ditches and canals so that there will be no likelihood of their clogging up with the shifting sands in the near future. Even then all these provisions do not make for absolute safety of irrigation bonds. There must also be the certainty that there is no legal flaw in the rights to the water supply; also that there will be no disappointment in the sale of water rights sufficient to provide enough acreage to redeem all the bonds and pay all the interest. The mere fact that a reservoir is constructed, and all the ditches and canals, is not in itself

a complete assurance of the safety of irrigation bonds, for the farmer is supposed to pay off his water rights in easy payments covering a stated number of years and he can do it only by obtaining his water regularly.

A dry season is likely to cause an irrigation company to default on its interest because it will be unable to collect from the settlers their payments, unless behind the projects are financial interests strong enough to see it safely through an off season. Likewise until such projects are completed and settlers for the land secured, the irrigation bonds it issues, properly considered, are construction bonds, that is, bonds of an uncompleted enterprise whose interest must be provided out of the treasury of the company until it is in a position to earn revenues.

There are no bonds more speculative than bonds of this character. In fact the interest their holders receive, in most instances, comes directly from the very money they pay in for their bonds. Because of this element of uncertainty, it is of vital importance that the financial standing of the backers of an enterprise, no matter what its character, be carefully weighed, to determine whether they are strong enough to finance their project to completion. However bright the prospects may appear, no enterprise can take advantage of them until it is first completely financed. For the risk investors must assume in a project in the process of construction, they should, in all fairness, receive, in addition to the bonds they buy, a certain proportion in stock as a bonus, for they speculate on the chances of success, and should financial difficulties arise, which is always a possibility, they face an assessment in an effort to raise the money to put the enterprise on a going basis again. A stock bonus is the usual form of compensation for those risks.

Carey Act Bonds

Our Government recognized the danger likely to arise from the reckless exploitation of irrigation schemes and, as a measure of protection for the farmer and investor alike, some years ago enacted what is known as the Carey Act. Under this act, authority was conferred upon the state and territorial governments to pass upon the plans prepared by privately organized irrigation projects for the construction of reservoirs, ditches, and laterals, or small canals, by means of which the land was to be fed with water. By the same act, rights to the available water supply were conferred to prevent the overabsorption of the needed supply by too many separate enterprises, but despite these wise precautions, failures have occurred, showing how much judgment can err in an entirely new and untried field.

United States Irrigation Bonds

Our Government, as late as 1910, authorized a large issue of bonds, the proceeds of which are to be used to carry forward, on a much larger scale, the irrigation work planned by the Department of Reclamation. Those bonds are to be redeemed out of the money realized by the Government from the sale of water rights to the settlers.

Municipal District Bonds

Some of our western states, in an effort to reclaim their arid lands, have arranged by legislation that certain districts may organize into municipal districts and issue bonds for irrigation purposes. But their bonds are by no means as safe as the bonds which are authorized by the United States government.

They are in fact, in some instances, inferior to irrigation bonds of privately organized enterprises. These municipal irrigation district bonds depend for their interest and redemption upon the ability of the community to pay the taxes. In a good many instances, the amount of such bond issues is not based on the already existing population, but on a future population that is expected when the district receives the full benefit from the irrigation planned by the issuance of the bonds. If the irrigation project is a failure and the expected water does not materialize, naturally the settlers then have no means to meet their taxes and their lands which remain dry are hardly worth foreclosing upon. That this is possible has already been shown by the default of interest on a number of such municipal irrigation district bonds of some of the Western states during 1910 and 1911.

By way of summary I wish to point out the investment characteristics of irrigation bonds:

1. The character and ability of the men backing the enterprise.
2. The quantity of water available and the regularity of its flow.
3. The legal rights to the quantity of water. A great body of law has developed in our Western states governing priority of rights.
4. The character and fertility of the soil.
5. The character of the crops that can be raised.
6. Transportation facilities and markets for the crops.

TEST QUESTIONS

1. What place does irrigation hold in modern agricultural development?
2. What are the four classes of irrigation bonds?

3. How do private corporations promote irrigation enterprises?

4. What pitfalls should one avoid when investing in private irrigation bonds?

5. Describe the Carey Act irrigation bonds. What is their degree of safety as an investment security?

6. How did the United States irrigation bonds come into existence?

7. Explain the investment possibilities in municipal district irrigation bonds.

8. What tests should be applied when contemplating an investment in irrigation bonds?

CHAPTER XII

MINING AND TIMBER BONDS

Mining Enterprises

Beyond all doubt there is no type of bonds more speculative than those issued against undeveloped ventures, whatever their nature, be it coal, silver, marble, lead, zinc, gold, or copper properties. For one thing they are secured by an invisible asset, whose value can only be estimated by the uncertain skill of mining engineers.

We are told, especially in connection with copper-mining properties, that mining engineers have so far reduced their profession to an exact science, as to be able to determine, where indications of copper ore have been discovered, how they may block out the ore and measure the amount underlying the claims. This they say can be done by drilling to get at the percentage of copper to each ton of ore, and then multiplying the number of tons by this percentage. In other words they maintain that they can reduce mining to a point where there is no more uncertainty than in manufacturing.

I do not put any faith in this specious argument, at least so long as some of the most prominent mining engineers continue making serious blunders in their estimates. John Hays Hammond, who is regarded as one of the foremost men in his profession, has repeatedly erred in his reports on mining properties.

If it is possible to measure with any degree of certainty

the treasures Mother Earth conceals, it does not reach far beyond the coarser mineral formations like coal and marble. The last mentioned, because it is of a quarry formation, comes in vast quantities and where found is of a perpendicular formation, in layers or strata, thus permitting one to place a certain reliance upon measurements. Coal, on the other hand, runs in horizontal layers, for it is formed by the carbonization of decayed vegetable life. The softer coal, or that known as bituminous coal, lies nearest to the earth's surface. As coal is found in blanket formation, it is possible, where a field is discovered, to determine to a certain extent the quantity of the deposits by means of core drilling.

That is not true, though, of the more precious minerals. Nature has not been so provident in the distribution of these metals that their quantity can be measured by any yard-stick. It is the writer's contention that of all assets, undeveloped mining properties do not at all properly belong to a class of securities on which bonds should be issued. An investor might as well take his chances with all the other stockholders in the enterprise and share in the profits if the undertaking proves successful.

A bond in an undeveloped mining enterprise represents the most perishable kind of asset. If the mineral yield becomes exhausted, the property then has no value beyond the mills and mine structures, which at most, as assets, are not worth very much, unless usable by a going mine.

The holder of a mining bond has to depend for the return of his principal and interest upon the profits realized from the ore produced. It is therefore necessary that the mine's life and production shall extend beyond the maturity of the bonds issued by it. How can this be known to a certainty?

The majority of mining bonds are issued as convertible bonds, giving the holder the opportunity of changing from creditor into partner at a certain fixed price for the stock, but it may be assumed that if a mine development points to success, the bondholder might as well from the beginning be a stockholder, considering all the risk he has to take; for did the mine fail, he would be out in the cold with the stockholders, except that he could foreclose upon barren, unproductive mining claims of no value.

Bonds in oil companies are of a similar class. No assurance can be placed upon the continuation of the oil supply. To convince ourselves what dangerous investments these bonds are, we need look no further than the great mass of such defaulted securities.

Of course, I refer principally to mining companies in process of development. There are mining properties whose bonds come within the category of investments. These bonds are, however, issued by corporations which are already assured of a certain production and have issued bonds to provide funds for opening up new areas, but which are not dependent for their redemption upon the new ores, but assure their payment, both as to principal and interest, out of their present and known production. There are a great many such mining corporations, notably among the successful coal-mining companies.

Nature of Timber Bonds

Our available timber resources have reached such a stage of depletion that the remaining timber tracts are exceedingly valuable. Thus within the last few years timber has come to be regarded as desirable security for bond issues. Standing timber of itself is valuable only when it can be cut and brought at a profit to the market,

and when it is to secure a bond issue, there are certain elements of risk which should be seriously taken into consideration. The greatest risk is that of fire, which may quickly denude a tract of the greater part of its standing timber. Insurance companies will not accept risks on standing timber, for they consider the hazard too great.

The owners of standing timber, however, attempt to guard against fire by many ingenious methods: building ditches and embankments through the tract to check the spread of a fire; establishing patrols and fire stations; cutting away the thick undergrowth; and back-firing a forest with the help of experienced foresters. But notwithstanding all these wise measures of precaution, bonds based upon timber lands should be classified as coming within the class of speculative bonds, from which, because of the risks involved, an unusually good income should be received by those who invest their money in them.

A timber bond issue is based upon the quantity of standing timber against which the bonds are issued. "Cruisers," or men who measure the timber, are depended upon to make the estimate, and on their figures and the market price of timber the bonds are issued. From this it may be seen what great dependence the investors must place upon the accuracy of human intelligence.

To retire the bonds, a certain percentage is set aside each year from the sale of the timber, and that percentage should be large enough to redeem the bonds automatically, as every foot of timber cut correspondingly reduces the assets securing the bonds, which cannot again be replaced except through new growth from replanting. Where this is done, it is a slow process.

There is no general rule by which the intrinsic value of timber can be measured, for chance and the incalculable human element largely enter into it. The character of the men behind such propositions is equal in importance, in connection with the safety of timber bonds, to the safe-guards against fires. The conservative appraisal of the amount of timber available, the nearness of the tract to a market, the price of the timber, and the percentage set aside from each year's sales, all have an important bearing on such bonds and demand from investors their most careful scrutiny.

TEST QUESTIONS

1. Why are mining bonds, as a rule, the most speculative of all bonds?
2. Is it possible to determine mining resources to a certainty? Explain.
3. What do bonds of undeveloped mining properties lack to make them safe investments?
4. If you had your choice of the stock or bonds of an undeveloped mining property, which would you choose? Why?
5. Under what conditions are mining bonds reasonably safe investments?
6. What is the greatest risk in timber bonds?
7. What factors should be considered when investing in timber bonds?

CHAPTER XIII

GUARANTEED STOCKS

Large corporations sometimes find it more convenient, in securing control of smaller corporations whose strategical position or favorable earnings will benefit them, to guarantee the interest on their bonds and the dividends on their stock, than to lay out a considerable amount of money to acquire them. Indeed it often happens that the holders of the securities will not part with them, but do not object to a lease of their property in return for a guarantee of a certain dividend upon their shares. Such stocks are known as "guaranteed stocks." Their dividends are guaranteed at a fixed annual rate by a lease made for a term of years, usually 99 years, 999 years, or perpetually. Such stock sometimes carries other privileges, which can be ascertained only by an examination of each issue and guarantee.

There are a large number of small railroads whose names, if given, would be unfamiliar now to the general public, although they are very prosperous properties, whose dividends on their shares are guaranteed by other railroads. These roads were taken over by lease many years ago, and have become so grafted into the main system of their guarantor roads, that they are today, in all essentials, a vital part of the larger corporations.

Parts of nearly all our principal trunk lines are made up of smaller roads welded into one, although existing as separate corporations. This is the condition which

investigation will show exists in the Delaware & Hudson, the Lackawanna, the Reading, the Pennsylvania, the New York Central, the Lehigh Valley, the Jersey Central, and other roads. Some of the small roads whose dividends these roads guarantee, existed before the holding corporations came into existence. The Morris & Essex Railroad is an example. The road was built before the Delaware, Lackawanna & Western, as one system, was planned. A list of guaranteed stocks and their guarantors follows.

Albany & Susquehanna R. R. Co., 12.25% Stock.
  Guarantor: Delaware & Hudson Co.
Albany & Vermont R. R. Co., 3% Stock.
  Guarantor: Delaware & Hudson Co.
Allegheny & Western Ry. Co., 6% Stock.
  Guarantor: Buffalo, Rochester & Pittsburgh Ry. Co.
American Telegraph & Cable Co., 5% Stock.
  Guarantor: Western Union Telegraph Co.
Atlanta & Charlotte Air Line Ry. Co., 7% Stock.
  Guarantor: Southern Railway Co.
Augusta & Savannah R. R. Co., 5% Stock.
  Guarantor: Central of Georgia Ry. Co.
Avon, Geneseo & Mount Morris R. R. Co., 3½% Stock.
  Guarantor: Erie R. R. Co.
Beech Creek R. R. Co., 4% Stock.
  Guarantor: New York Central & Hudson River R. R. Co.
Bleecker St. & Fulton Ferry R. R. Co., 1½% Stock.
  Guarantor: New York Railways Co.
Boston & Albany R. R. Co., 8¾% Stock.
  Guarantor: New York Central & Hudson River R. R. Co.
Boston & Lowell R. R. Co., 8% Stock.
  Guarantor: Boston & Maine R. R. Co.
Boston & Providence R. R. Co., 10% Stock.
  Guarantor: New York, New Haven & Hartford R. R. Co.
Broadway & Seventh Avenue R. R. Co., 10% Stock.
  Guarantor: New York Railways Co.

Brooklyn City R. R. Co., 8%-10% Stock.
    Guarantor: Brooklyn Heights R. R. Co. (B. R. T. System).
Burlington, Cedar Rapids & Northern Ry. Co., 6% Stock.
    Guarantor: Chicago, Rock Island & Pacific Ry. Co.
Camden & Burlington County R. R. Co., 6% Stock.
    Guarantor: Pennsylvania R. R. Co.
Canada Southern Ry. Co., 3% Stock.
    Guarantor: Michigan Central R. R. Co.
Catawissa R. R. Co., Pfd. 1st & 2nd Issues, 5% Stock.
    Guarantor: Philadelphia & Reading Ry. Co.
Cayuga & Susquehanna R. R. Co., 9% Stock.
    Guarantor: Delaware, Lackawanna & Western R. R. Co.
Chattahoochee & Gulf R. R. Co., 5% Stock.
    Guarantor: Central of Georgia Ry. Co.
Christopher & Tenth St. R. R. Co., 8% Stock.
    Guarantor: New York Railways Co.
Cincinnati, Sandusky & Cleveland Ry. Co., 6% Pfd. Stock.
    Guarantor: Cleveland, Cincinnati, Chicago & St. Louis Ry. Co.
Cleveland & Pittsburgh R. R. Co., 7% Stock.
Cleveland & Pittsburgh R. R. Co., Special Betterment 4% Stock.
    Guarantor: Pennsylvania R. R. Co. (Pennsylvania Co.).
Columbus & Xenia R. R. Co., 8% Stock.
    Guarantor: Pittsburgh, Cincinnati, Chicago & St. Louis Ry. Co.
Commercial Union Telegraph Co. of New York, 6% Stock.
    Guarantor: Postal Telegraph Company.
Concord & Montreal R. R. Co., 7% Stock.
    Guarantor: Boston & Maine R. R. Co.
Connecticut & Passumpsic Rivers R. R. Co., 6% Pfd. Stock.
    Guarantor: Boston & Lowell R. R. Co.
Connecticut Railway and Lighting Co., 4% Pfd. Stock.
Connecticut Railway and Lighting Co., 4% Common Stock.
    Guarantor: Consolidated Railway Co. (New York, New Haven & Hartford R. R. Co.).
Connecticut River R. R. Co., 10% Stock.
    Guarantor: Boston & Maine R. R. Co.

Dayton & Michigan R. R. Co., 8% Pfd. Stock.
Dayton & Michigan R. R. Co., 3½% Common Stock.
    Guarantor: Cincinnati, Hamilton & Dayton Ry. Co.
Delaware & Bound Brook R. R. Co., 8% Stock.
    Guarantor: Philadelphia & Reading Ry. Co.
Delaware R. R. Co., 8% Stock.
    Guarantor: Philadelphia, Baltimore & Washington R. R. Co. (Pennsylvania R. R. System).
Detroit, Hillsdale & Southwestern R. R. Co., 4% Stock.
    Guarantor: Lake Shore & Michigan Southern Ry. Co.
Dover & Rockaway R. R. Co., 6% Stock.
    Guarantor: Central R. R. of New Jersey.
East Pennsylvania R. R. Co., 6% Stock.
    Guarantor: Philadelphia & Reading Ry. Co.
Eighth Avenue R. R. Co., 16% Stock.
    Guarantor: New York Railways Co.
Elmira & Williamsport R. R. Co., 6.4% Pfd. Stock.
Elmira & Williamsport R. R. Co., 4.54% Common Stock.
    Guarantor: Northern Central Ry. Co.
Erie & Kalamazoo R. R. Co., 9.75% Stock.
    Guarantor: Lake Shore & Michigan Southern Ry. Co.
Erie & Pittsburgh R. R., 6.4% Stock.
    Guarantor: Pennsylvania R. R. Co. (Pennsylvania Co.).
European & North American Ry. Co., 5% Stock.
    Guarantor: Maine Central R. R. Co.
Fitchburg R. R. Co., 5% Pfd. Stock.
    Guarantor: Boston & Maine R. R. Co.
Forty-second St. & Grand St. Ferry R. R. Co., 18% Stock.
    Guarantor: New York Railways Co.
Franklin Telegraph Co., 2½% Stock.
    Guarantor: Western Union Telegraph Co.
Ft. Wayne & Jackson R. R. Co., 5½% Pfd. Stock.
    Guarantor: Lake Shore & Michigan Southern Ry. Co.
Geneva, Corning & Southern R. R. Co., 3½% Common Stock.
    Guarantor: New York Central & Hudson River R. R. Co.
Georgia R. R. & Banking Co., 12% Stock.
    Guarantor: Louisville & Nashville R. R. Co. and Atlantic Coast Line R. R. Co.

Gold & Stock Telegraph Co., 6% Stock.
Guarantor: Western Union Telegraph Co.
Grand River Valley R. R. Co., 5% Stock.
Guarantor: Michigan Central R. R. Co.
Greene R. R. Co., 6% Stock.
Guarantor: Delaware, Lackawanna & Western R. R. Co.
Harrisburg, Portsmouth, Mount Joy & Lancaster R. R. Co., 7½% Stock.
Guarantor: Pennsylvania R. R. Co.
Hartford & Connecticut Western R. R. Co., 2% Stock.
Guarantor: Central New England Ry. Co.
Hereford Ry. Co., 4% Stock.
Guarantor: Maine Central R. R. Co.
Hibernia Mine R. R. Co., 3% Stock.
Guarantor: Central R. R. of New Jersey.
Illinois Central Leased Line, 4% Stock.
Guarantor: Illinois Central R. R. Co.
Illinois and Mississippi Telegraph Co., 4% Stock.
Guarantor: Western Union Telegraph Co.
International Ocean Telegraph Co., 6% Stock.
Guarantor: Western Union Telegraph Co.
Jackson, Lansing & Saginaw R. R. Co., 3½% Stock.
Guarantor: Michigan Central R. R. Co.
Joliet & Chicago R. R. Co., 7% Stock.
Guarantor: Chicago & Alton R. R. Co.
Kalamazoo, Allegan & Grand Rapids R. R. Co., 5.9% Stock.
Guarantor: Lake Shore & Michigan Southern Ry. Co.
Kansas City, Fort Scott & Memphis Ry. Co., 4% Pfd. Trust Ctfs.
Guarantor: St. Louis & San Francisco R. R. Co.
Kansas City, St. Louis & Chicago R. R. Co., 6% Pfd. Stock.
Guarantor: Chicago & Alton R. R. Co.
Lackawanna R. R. Co. of New Jersey, 4% Stock.
Guarantor: Delaware, Lackawanna & Western R. R. Co.
Lake Shore & Michigan Southern Ry. Co., 10% Stock.
Guarantor: Lake Shore & Michigan Southern Ry. Co.
Little Miami R. R. Co., 8.6% Stock.
Guarantor: Pittsburgh, Cincinnati, Chicago & St. Louis Ry. Co.

Little Schuylkill Navigation R. R. and Coal Co., 5% Stock.
Guarantor: Philadelphia & Reading Ry. Co.
Louisiana & Missouri River R. R. Co., 7% Pfd. Stock.
Guarantor: Chicago & Alton R. R. Co.
Lykens Valley R. R. & Coal Co., 4% Stock.
Guarantor: Northern Central Ry. Co.
Mahoning Coal R. R. Co., 5% Pfd. Stock.
Guarantor: Lake Shore & Michigan Southern Ry. Co.
Manchester & Lawrence R. R. Co., 10% Stock.
Guarantor: Boston & Maine R. R. Co.
Manhattan Ry. Co., 7% Stock.
Massawippi Valley Ry. Co., 6% Stock.
Guarantor: Connecticut & Passumpsic Rivers R. R. Co.
Mill Creek & Mine Hill Navigation and R. R. Co., 10% Stock.
Guarantor: Philadelphia & Reading Ry. Co.
Mine Hill & Schuylkill Haven R. R. Co., 5½% Stock.
Guarantor: Philadelphia & Reading Ry. Co.
Minneapolis, St. Paul & S. S. Marie Leased Line, 4% Stock.
Guarantor: Minneapolis, St. Paul & Sault Ste. Marie Ry. Co.
Mobile & Birmingham R. R. Co., 4% Pfd. Stock.
Guarantor: Southern Ry. Co.
Mobile & Ohio R. R. Co., 4% Stock Trust Ctfs.
Guarantor: Southern Ry. Co.
Morris & Essex R. R. Co.; 7% Stock.
Guarantor: Delaware, Lackawanna & Western R. R. Co.
Morris & Essex Extension R. R. Co., 4% Stock.
Guarantor: Delaware, Lackawanna & Western R. R. Co.
Nashville & Decatur R. R. Co., 7½% Stock.
Guarantor: Louisville & Nashville R. R. Co.
Newark & Bloomfield R. R. Co., 6% Stock.
Guarantor: Morris & Essex R. R. Co.
New London Northern Ry. Co., 9% Stock.
Guarantor: Central Vermont Ry. Co.
New York & Harlem R. R. Co., Pfd. and Common, 14% Stock.
Guarantor: New York Central & Hudson River R. R. Co. and New York Railways Co.
New York, Brooklyn & Manhattan Beach Ry. Co., 5% Pfd. Stock.
Guarantor: Long Island R. R. Co.

New York, Lackawanna & Western Ry. Co., 5% Stock.
Guarantor: Delaware, Lackawanna & Western R. R. Co.
New York Mutual Telegraph Co., 6% Stock.
Guarantor: Western Union Telegraph Co.
Ninth Avenue R. R. Co., 8% Stock.
Guarantor: New York Railways Co.
North Carolina R. R. Co., 7% Stock.
Guarantor: Southern Ry. Co.
Northern R. R. Co. of New Hampshire, 6% Stock.
Guarantor: Boston & Maine R. R. Co.
Northern R. R. Co. of New Jersey, 4% Stock.
Guarantor: Erie R. R. Co.
North Pennsylvania R. R. Co., 8% Stock.
Guarantor: Philadelphia & Reading Ry. Co.
Northwestern Telegraph Co., 6% Stock.
Guarantor: Western Union Telegraph Co.
Norwich & Worcester R. R. Co., 8% Pfd. Stock.
Guarantor: New York, New Haven & Hartford R. R. Co.
Ogden Mine R. R. Co., 5% Stock.
Guarantor: Central R. R. of New Jersey.
Old Colony R. R. Co., 7% Stock.
Guarantor: New York, New Haven & Hartford R. R. Co.
Oswego & Syracuse R. R. Co., 9% Stock.
Guarantor: Delaware, Lackawanna & Western R. R. Co.
Pacific & Atlantic Telegraph Co., 4% Stock.
Guarantor: Western Union Telegraph Co.
Passaic & Delaware Extension R. R. Co., 4% Stock.
Guarantor: Delaware, Lackawanna & Western R. R. Co.
Passaic & Delaware R. R. Co., 5% Stock.
Guarantor: Delaware, Lackawanna & Western R. R. Co.
Paterson & Hudson River R. R. Co., 8% Stock.
Guarantor: Erie R. R. Co.
Paterson & Ramapo R. R. Co., 6% Stock.
Guarantor: Erie R. R. Co.
Pemigewasset Valley R. R. Co., 6% Stock.
Guarantor: Boston & Maine R. R. Co.
Peoria & Bureau Valley R. R. Co., 8% Stock.
Guarantor: Chicago, Rock Island & Pacific Ry. Co.

Philadelphia & Trenton R. R. Co., 10% Stock.
Guarantor: Pennsylvania R. R. Co.
Philadelphia, Germantown & Norristown R. R. Co., 12% Stock.
Guarantor: Philadelphia & Reading Ry. Co.
Pittsburgh, Bessemer & Lake Erie R. R. Co., 6% Pfd. Stock.
Pittsburgh, Bessemer & Lake Erie R. R. Co., 3% Common Stock.
Guarantor: Bessemer & Lake Erie R. R. Co. and Carnegie Steel Co.
Pittsburgh, Fort Wayne & Chicago Ry. Co., Original 7% Stock.
Pittsburgh, Fort Wayne & Chicago Ry. Co., Special 7% Stock.
Guarantor: Pennsylvania Railroad Co. (Pennsylvania Co.).
Pittsburgh, McKeesport & Youghiogheny R. R. Co., 6% Stock.
Guarantor: Pittsburgh & Lake Erie R. R. Co. and Lake Shore & Michigan Southern Ry. Co.
Pittsburgh, Youngstown & Ashtabula Ry. Co., 7% Pfd. Stock.
Guarantor: Pennsylvania Co.
Portland & Ogdensburg Ry. Co., 2% Stock.
Guarantor: Maine Central R. R. Co.
Providence & Worcester R. R. Co., 10% Stock.
Guarantor: New York, New Haven & Hartford R. R. Co.
Rensselaer & Saratoga R. R., 8% Stock.
Guarantor: Delaware & Hudson Co.
Rochester & Genesee Valley R. R. Co., 6% Stock.
Guarantor: Erie R. R. Co.
Rome & Clinton R. R. Co., $6\frac{1}{8}$% Stock.
Guarantor: Delaware & Hudson Co.
Rutland & Whitehall R. R. Co., 6% Stock.
Guarantor: Delaware & Hudson Co.
St. Joseph, South Bend & Southern R. R. Co., 5% Pfd. Stock.
St. Joseph, South Bend & Southern R. R. Co., 3% Common Stock.
Guarantor: Michigan Central R. R. Co.
St. Louis Bridge Co., 1st Pfd. 6% Stock.
St. Louis Bridge Co., 2nd Pfd. 3% Stock.
Guarantor: Terminal R. R. Association of St. Louis.
Saratoga & Schenectady R. R. Co., 7% Stock.
Guarantor: Delaware & Hudson Co.
Sharon Ry. Co. 6% Stock.
Guarantor: Erie R. R. Co.

Sixth Avenue R. R. Co., 7% Stock.
Guarantor: New York Railways Co.
Southern and Atlantic Telegraph Co., 5% Stock.
Guarantor: Western Union Telegraph Co.
Southwestern R. R. Co. (of Georgia), 5% Stock.
Guarantor: Central of Georgia Ry. Co.
Syracuse, Binghamton & New York R. R. Co., 12% Stock.
Guarantor: Delaware, Lackawanna & Western R. R. Co.
Troy & Bennington R. R. Co., 10% Stock.
Guarantor: Boston & Maine R. R. Co.
Troy & Greenbush R. R. Association, 7% Stock.
Guarantor: New York Central & Hudson River R. R. Co.
Tunnel R. R. Co. of St. Louis, 6% Stock.
Guarantor: Terminal R. R. Association of St. Louis.
Twenty-third Street Ry. Co., 18% Stock.
Guarantor: New York Railways Co.
United New Jersey R. R. and Canal Co., 10% Stock.
Guarantor: Pennsylvania R. R. Co.
Utica, Chenango & Susquehanna Valley R. R. Co., 6% Stock.
Guarantor: Delaware, Lackawanna & Western R. R. Co.
Utica, Clinton & Binghamton R. R. Co., 5% Debenture Stock.
Utica, Clinton & Binghamton R. R. Co., 3¾% Common Stock.
Guarantor: Delaware & Hudson Co.
Valley R. R. Co. of New York, 5% Stock.
Guarantor: Delaware, Lackawanna & Western R. R. Co.
Vermont & Massachusetts R. R. Co., 6% Stock.
Guarantor: Boston & Maine R. R. Co.
Warren R. R. Co., 7% Stock.
Guarantor: Delaware, Lackawanna & Western R. R. Co.

Quite naturally these guaranteed stocks as an investment are graded according to the importance which the properties have to the corporations leasing them and also with respect to the financial strength of the guarantors. With such financially powerful corporations as the Pennsylvania and the Lackawanna, the stocks of leased lines whose dividends they guarantee grade as high in

conservative investment circles as do their best mortgage bonds. That is why these stocks sell at a stiff premium. The dividends guaranteed on some of these leased lines' stocks run as high as 12 per cent to 16 per cent per annum, but they command prices which reduce their net yield close to 4 per cent per annum. The holders of these securities, whether estates, banks, life insurance companies, or individual investors, are not anxious to dispose of them, as they fully realize the intrinsic value of their investments. The more closely such guaranteed stocks are held, the more it reflects the superior position accorded them in financial circles.

There are leased-line guaranteed stocks which could be safely regarded as immune even from the severest panic. Their impregnable position is due entirely to the fact that they could not be abandoned without dismembering an important system, a thing which the owners of securities amounting to millions would not permit under any circumstances.

Railroads enter largely into the policy of absorbing other roads by means of leases. Sometimes the object is the elimination of competition. At other times one road will acquire control of another to keep an important rival from gaining an entrance into a certain territory. Again the reason may be simply that the lease is profitable.

The shrewd people back of the Canadian Pacific had plans to get into Chicago. To build a road to the important traffic-originating centers would prove a costly bit of financing, and even then it would remain a serious problem whether a new line could earn its board. Therefore, when the Wisconsin Central was in the market, the Canadian Pacific saw an opportunity to reach Chicago without great expense, by leasing this property, in return

for which it guaranteed a small dividend on the road's preferred stock.

In the expansion of our railroads, the practice of absorbing, by lease, important roads with which an alliance would be profitable will go on steadily. With the growth of traffic on these leased lines, their business frequently turns into the treasury of the controlling road a good profit, as they are entitled to the revenues in excess of what is required for the dividends they guarantee.

As the earnings of the leased lines are included in the earnings of the controlling lines, there is no way of determining what is their actual income return. But in this the investor is not actually interested, as long as the guarantors make good their guaranty. It is realized that they cannot default in the payment of the dividends without losing control of the property, a thing that they wish to guard against.

Industrial corporations also guarantee the dividends of rivals they have absorbed. Their guaranteed stocks should be judged by the margin of profits reported in the annual statements. In this manner their security as investments can be properly appraised.

TEST QUESTIONS

1. What is the nature of guaranteed stock?
2. What are the investment merits of guaranteed stock?
3. How did railroad guaranteed stock come into existence?
4. Give an instance where railroad expansion took place by this method.
5. How is the investment value of guaranteed stock determined?

CHAPTER XIV

AMORTIZATION AND SINKING FUNDS

Amortization means the reduction of debt. A corporation issuing bonds may prefer to provide for their payment at maturity through a sinking fund, for the account of which a stated sum is set aside each year, rather than to rely on other means to discharge the debt when it falls due.

This policy has many advantages. It makes it much easier to discharge the debt, as the payments made when spread over a period of years are less burdensome than when provided in a lump sum. Then, also, contributions to a sinking fund to amortize gradually a bonded obligation, can be made to earn interest, which interest, compounding itself, also accumulates money towards the payment of the debt. Thus money is made to earn money.

It is frequently provided, in the interest of a sinking fund, that bonds, for the retirement of which the sinking fund has been created, can be repurchased at a stated price, either by call upon the holders of the bonds or in the open market. A corporation then either cancels the bonds and reduces its fixed charges, or pays into the sinking fund the coupons of the bonds which have been purchased for its account.

There are various ways by which a sinking fund operates. They cannot all be mentioned here. But a bond that has set aside for its retirement a sinking fund,

or for which arrangements have been made to amortize by gradual payments, is considerably strengthened as an investment where the operations of a corporation are profitable.

The fact that a sinking fund has been created for the retirement of certain bonds is not in itself a proof of strength. If a corporation is making no profit, it cannot lay aside money for its sinking fund. Certainly it cannot take the necessary money out of its capital, as that only weakens the corporation in one direction, without strengthening it in another.

The advantage of amortization is in connection with bonds issued by producing mine companies, and corporations operating in perishable assets. By setting aside a part of the proceeds from the sale of their products, they are more certain to retire the bonds when they mature. Without a sinking fund, such corporations face the danger of not having the money on hand to pay off the bonds should their properties exhaust themselves.

This matter is likewise of some importance in connection with non-productive enterprises such as sewers, streets, parks, etc., of municipalities. The bonds of a city which provides an adequate sinking fund for their redemption are more certain of being paid at maturity than others for which no such provisions have been made.

TEST QUESTIONS

1. What is the meaning of amortization?
2. What are the arguments in favor of providing a sinking fund?
3. In what way does an amortization plan strengthen a bond?
4. Why is a sinking fund of special importance in connection with concerns whose assets are subject to exhaustion or to depreciation in value?

CHAPTER XV

BONDS FOR WOMEN AND ESTATES

Investments for women and estates ought to have all the speculative elements eliminated as far as human foresight can guard against them. Women and children belong to a class of investors who can least afford to take risks, no matter how small, as they have no means of repairing their losses in the event that any of their securities go wrong, dependent as they are upon the continuation of their incomes.

An illustration of how necessary it is to exercise extreme care when making investments for women and estates is recalled in a distressing case that came to my attention as the outcome of the failure of the Third Avenue Railroad. An elderly woman was left 300 shares of the stock in this company when they were selling around $200 a share and when there was not even a breath of suspicion that anything could go wrong with this property. This stock represented an investment at the then market price of over $60,000 and was sufficient to give the woman an income of over $3,000 a year, enough to provide for all her necessary comforts. Overnight her fortune was swept away and her income vanished as the result of the failure of the company. In place of comfort for her declining years she saw poverty staring her in the face. She was finally prevailed upon to sell her stock for $30 a share, stock that cost $200, for she had no means with which to pay a large assessment.

On the interest she receives from her money in a strong savings bank, she is finding it hard to make both ends meet.

It would have been far better for this woman to have her $60,000 invested in government bonds, though they would have brought her an income of only $1,200 a year.

I cite this case in order to show clearly that the smallest risk can quickly become the greatest risk. Such bonds as construction bonds, mining bonds, collateral bonds, unsecured debenture bonds, and notes, or for that matter any bonds unless properly secured by physical assets, belong to investments that cannot be safely recommended to dependent women or estates. In saying this, I have no intention to reflect upon the desirable securities of this class, of which there are many, but to emphasize the advisability of minimizing all risks.

Security is the foremost consideration for such investors. Income is secondary. The undoing of many of these investors directly results from a desire to increase the income at the expense of safety.

In the selection of investments for women and estates the suggestion is made that the same rules be applied as govern the investments of savings banks in Massachusetts, New York, Connecticut, Illinois, Ohio, Pennsylvania, and other states. These laws are the combined result of the most careful study in determining the safest character of investments. Copies of these laws may easily be secured by writing to the secretary of state of each of the various states. The laws of some states regulating the investment of funds by executors, administrators, and trustees fall in the same class.

The foregoing laws usually authorize the investment of funds in some of the following classes of securities:

1. Bonds of the United States.

2. Bonds issued by the states.

3. Bonds of any county, city, town, or other municipal corporation where the total indebtedness does not exceed a certain per cent of the assessed valuation of taxable property. Usually, the limit of indebtedness is anywhere from 10 to 15 per cent.

4. Bonds or notes secured by a first mortgage on real estate. The acts usually provide that the estimated worth of the real estate shall be at least twice the amount of the loan.

5. Bonds of certain railroad and industrial corporations which are listed on the exchange and on which there have been no defaults in the payment of interest or principal over a period of five years or more.

The exact provision in each case can be ascertained only by referring to the statute and such administrative rulings as may have been made by the state banking departments or other authorities.

TEST QUESTIONS

1. Why should investments for women and estates be free from speculative elements?

2. What sorts of securities are to be avoided?

3. What should be the first consideration of such an investment?

4. How do state laws regarding legal investments for savings banks aid in determining the classes of securities suitable for women and estates?

5. What are some of the most common provisions of such laws?

CHAPTER XVI

THE VALUATION OF BONDS

Introduction

The method of valuing a bond does not differ essentially from that of valuing any other thing which possesses worth. It is simply a question of knowing and applying the right principles. A real estate man applies certain tests or principles in determining the value of a piece of city or suburban property. If he knows his tests and how to apply them, he will be reasonably safe in the valuation which he places upon the property. The valuation of bonds is likewise based upon certain logical and well-established principles. These tests an investor may always apply before purchasing bonds.

Earning Power of the Corporation

The first and perhaps most fundamental test to apply in valuing a bond is the earning power of the corporation issuing it. The general character of the corporation should be noted, as well as its affiliations and the nature of its business. In fact, if the revenue-producing capacity of the company has once been determined, then all other tests are really subordinate.

Each corporation will have to be judged by the nature of its business. If it is a railroad, what sort of territory does it operate in? What is its competition, actual or potential? It is making money? Is it an independent

road or is it a part of a big system, perhaps with its earning power guaranteed?

Should the bonds be issued upon an office building, other tests must be applied. Is the title to the ground site complete? In what city is it located—a growing or a declining city? In what portion of the city? To what class of renters is it apt to appeal? What is the amount of insurance on the building? Such are the questions that need to be considered.

In valuing public utility bonds other tests must be applied, such as the nature of the franchise, the prosperity of the town, the attitude of the people of the town, the political situation, the possibilities for substitution, and special distributing conveniences or difficulties. In judging the value of the securities of any company, therefore, such questions as the nature of a business, the territory, and the people, must be observed in each individual case according to circumstances. A business which cannot answer satisfactorily such fundamental tests will never attract the careful investor, however well secured its bonds may appear to be. The name of the bond issue, therefore, is not so important as the promise of the business from which the interest and principal must be paid.

Security of the Bond

As already pointed out, the security which is pledged for the redemption of the bond is not the all-important factor. Nevertheless, certain characteristics deserve to be noticed in the security which is pledged. If it is a first mortgage bond, what is the reasonable value of the property on which it is secured as compared with the total amount of the issue? If not a first mortgage bond, then what bonds come ahead of it and how much property value remains after prior claims have been satisfied? It

is well to look into the junior issues as well, even though they cannot affect the security of the particular issue under condition. If a large issue comes after any particular bond and has been accepted at a fair value by the investing public, evidently the prior issue ought to be good.

When we have disposed of the relative value of the issue under consideration, the next question is how we are to ascertain whether the bonded indebtedness is reasonable or not. Take the case of a railroad: Is the bonded indebtedness of $30,000 per mile a safe indebtedness or not? Obviously no arbitrary figure like this can be used. An amount which might be reasonable on the plains might not be adequate in a mountainous region. Likewise the bonded indebtedness of a transcontinental line operating fast trains and carrying heavy loads would be different from that of a jerk-water branch road using lighter rails, a clay-ballast roadbed, etc.

The question whether the amount of bonds per mile is high or low is obviously purely relative. Investors whenever possible should compare the issue of one road with that of a similar road. For example, in considering Chicago and Northwestern bonds, he might compare conditions with the Northern Pacific, the Great Northern, the Chicago, Milwaukee and St. Paul, the Burlington, and similar lines.

Sponsorship of the Bond

The matter of sponsorship, which is really a question of responsibility, affects two factors—the issuing company and the selling agency. The careful investor will not purchase blindly. Men do not gather grapes from thorns. The responsibility and character of the issuing house

often carries more weight than does the nature or standing of the business in which the bonds are to be employed.

The responsibility of the issuing company is, of course, of first importance. A great many bonds have already established their reputation as safe investments and they are bought by investors without any special investigation. Among such may be mentioned certain issues of the Union Pacific or Pennsylvania bonds. There are all sorts of gradations from these safe investment bonds to those which are merely speculative.

Some investors judge the safety of a bond by the banking or bond house which attempts to dispose of them. Most of the great banking and bond houses of international reputation do not attempt to float an issue which is entirely speculative, and most of the bonds which are sold through reliable houses may be accepted without much further investigation. However, anyone who purchases blindly takes the risk of his own act. The purchaser should not forget that a bank has a direct financial interest in the sale of the security.

Rate of Interest

The rate of interest which a bond bears is one of the important factors in determining the price at which the bond will sell. Other things being equal, a bond bearing 5 per cent interest will sell at a higher figure than one bearing 4 per cent interest. The price of gilt-edge bonds is determined very largely by the interest rate of the bond. No speculative interest is attached to such a bond. The rate of the interest is fixed. The price that will be paid for such a bond, therefore, depends chiefly upon the prevailing rate of interest. There is no possibility of an increase in the income of ordinary bonds and therefore

the rate of interest becomes a fixed factor in determining the value of the bond.

The degree of marketability which a bond enjoys often determines its price as much as the interest rate. Two bonds bearing the same interest and exactly equal as regards all those things by which the value of a bond is judged, may sell at entirely different amounts, as determined by the marketability of the bond. The bond which can be turned into cash at any time quickly, brings the highest price. Under normal conditions no special concession need be made on such a bond in order to convert it into cash. In other cases the holder of a bond may be tied up a considerable length of time and unable to dispose of it when he desires. In estimating the purchase price for a bond, interest rate and marketability are the determining factors where the security is adequate.

Prevailing rates of interest fluctuate in the course of a year and over a period of years. I need not explain the causes of these changes but simply describe their effect upon security values. These variations in current interest rates make it possible to float an issue of bonds at such a rate of interest as to insure their sale at par during the course of their whole life. The interest rate on a bond is fixed and cannot fluctuate, but the principal may increase or decrease and thus accomplish the same thing. Therefore, when current rates of interest on like securities are higher than the rate of interest which a bond bears, the price of the bond declines so as to make the return from it approximate the current rate. On the other hand, if current rates of interest are lower than that of a bond, the bond is likely to sell above par and thus reduce its yield proportionally. The price of gilt-edge securities, therefore, fluctuates in response to the current rates of interest during the lifetime of the

FIG. 2.—Chart Showing the Course of the Average Price of Twenty Standard 4 Per Cent Railroad Bonds Since 1900

These bonds may be taken as representative of the whole railroad bond market. The break in the line during 1914 was caused by the closing of the New York Stock Exchange

bond. Figure 2 shows the fluctuations of twenty 4 per cent railroad bonds over a period of years. The 4's are the most substantial of the outstanding issues.

Length of Time to Run

The final factor to consider in the value of a bond is the length of time it has to run. A thousand-dollar bond bearing 4 per cent interest, when purchased at par, yields 4 per cent on the investment. But if it is purchased at $1,100, the return is naturally less than 4 per cent. The purchase price, therefore, is as important a factor in determining the returns from a bond as the rate of interest which it bears. Furthermore, if the above bond purchased at $1,100 were to run for all time, the yield would be 4 per cent divided by $1,100 or 3.64 per cent. If, however, this bond was to run for one year only, the buyer would receive at maturity $1,000, the face value of the bond, and $40 interest. Since he paid $1,100 for the bond, he would lose $60 on the transaction.

If this bond should run for ninety-nine years, the purchaser would receive interest upon the bond which would much more than make up for the loss which he sustained in the first year. He would distribute equally over this entire period the loss which he would suffer were he to pay such a premium for a bond maturing in one year.

This condition is exactly reversed when bonds are purchased below par. If this thousand-dollar bond had been purchased for $900 running one year, the purchaser would receive at the end of the year $1,000 as the principal of the bond and $40 for interest. He would, therefore, gain $140 during the year. This sum would be a return of 15.5 per cent on his investment. The longer the bond has to run, the less would be the return on the

investment and the nearer would the yield approach the 4 per cent interest which the bond bears.

Obviously, therefore, the bond of a solvent corporation will sell approximately at par as the time for its payment draws near. If a bond has been selling at a premium, it will tend downward toward par, while if it has been selling at a discount, it will tend to sell up toward par. The length of time which a bond has to run is therefore an important consideration in the purchase of all bonds which are not selling at par. The bond and interest tables sold on the market enable an investor to determine what the income yield is upon each bond for the length of time it has to run, the price it can be had for, and the fixed rate of interest.

Influence of Gold Production

Gold is as much a commodity of commerce as an article of consumption or an investment security. It responds to the law of supply and demand. It becomes cheap when it is plentiful and dear when it is scarce.

Since gold is used as the standard of value, its influence upon the value of security prices is evident. As gold becomes more plentiful, security prices decrease in value, because the purchasing power of the fixed income of bonds becomes constantly less. As gold becomes scarcer the opposite tendency sets in.

Investors should not be influenced too much by theoretical discussions of the increased production of gold and the prospect of its reducing the price of securities with fixed incomes. At the present time the only large gold-producing field in the world which shows a large annual increase is that of the Rand in South Africa. When one considers the increased need for gold which the advances in sciences and civilization call for, it seems likely that

the influence of this factor on rising prices is about to become less rather than more. Certainly, unless new fields are discovered or new methods of production are used so as greatly to increase the output, the gold factor should not worry investors.

TEST QUESTIONS

1. Why is the earning power of the issuer the most important point to be considered in the valuation of a bond?
2. What are some of the tests of earning power to be applied to a railroad bond? An office building bond? A public utility bond?
3. What factors should be considered in valuing the security back of a railroad bond?
4. Why is it important to know who is sponsor for a bond issue?
5. What relation does the rate of interest of a bond have to the investment value of the bond?
6. What effect does the length of life of a bond have upon the interest rates? The return?
7. What effect does the production of gold have upon bond values?

CHAPTER XVII

THE CHARACTER OF AN ENTERPRISE

PREDATORY FINANCE

Over one hundred million dollars annually are engulfed in the whirlpool of predatory finance. This is the amount one conservative estimate places as the tribute paid each year by credulous investors to the modernized American confidence man who has deserted gold bricks and green goods for the more inviting opportunities offered in selling worthless securities.

It is difficult to explain how it is that a people, normally intelligent as a class, permit themselves to be victimized each year out of such an enormous toll. Greed alone is not responsible for their credulity. A more logical reason is to be found in the great ignorance shown by the average investor of the character of securities. The majority act upon the assumption that everything is right without first investigating. They rest their faith in the honesty of the men who are asking them to invest their money. They assume that the public authorities would never permit these men to carry on their business were they aware beforehand of their dishonesty and that the powerful newspaper press would never allow them to use their pages to advertise their securities unless their backers were honest.

Unfortunately the authorities generally proceed upon the theory that it is none of their business to act upon

A Chance to Make a Fortune in a Copper Mine

by JULIUS SINGER

PITTSBURG SYNDICATE OFFERS $150,000.00 FOR PART OF "HAPPY JACK" HOLDINGS

This Stock Now 25c Per Share

WILL SOON BE $1.

NO POOR MINES ON KNIGHT'S ISLAND.

JULIUS SINGER, President:

I want to say that, in my opinion, there are no poor copper properties on Knight's Island. The Hubbard-Elliott stock is quoted at $8.00 per share, mine is 25 cents per share. They have one group of claims. I have a group right next to them, and two other groups besides.

Fortune Refused For One Group

On one of the other groups controlled by me under working bonds is the now famous "Happy Jack" claim, from which I expect to take out millions in copper. The ore will average about 10%. I claim that my stock at 25 cents per share is the best buy to-day in the market, and the best proof that this is true is that I was offered $150,000.00 spot cash last week by a Pittsburg syndicate for one of these groups on Knight's Island. I refused the offer. I am going to share my good fortune with the stockholders of the "Happy Jack" Copper Mining & Development Co.

Next Price 50 Cents

This stock will positively advance to 50c. at the close of business Tuesday, February 26. You can make 100 per cent by buying now.

The allotment of shares at the 25-cent price is limited. My advice to intending purchasers is to make reservations as early as possible, for the next advance will be a substantial one, and when the present allotment is subscribed no more will be sold at the 25-cent price. Better arrange to do so to-day to be on the safe side.

JULIUS SINGER, President.

"Happy Jack" Copper Mining & Development Company.

EASTERN FINANCIAL AGENTS,

NEW AMSTERDAM SECURITIES COMPANY,

3d Floor, Flatiron Building, New York City.

OUR OFFICES WILL BE OPENED UNTIL 9 P. M. MONDAY, TUESDAY AND WEDNESDAY EVENINGS OF THIS WEEK.

PURCHASE COUPON.

[illegible]

My Name is ....

City ....

State ....

HOW YOU MAY BUY STOCK NOW.

[illegible] cash buys 100 shares; $5.00 cash, $5.00 per month for 4 months.
[illegible] cash buys 200 shares; $10.00 cash, $10.00 per month for 4 months.
[illegible] cash buys 300 shares; $15.00 cash, $15.00 per month for 4 months.
[illegible] cash buys 500 shares; $25.00 cash, $25.00 per month for 4 months.
[illegible] cash buys 1,000 shares; $50.00 cash, $50.00 per month for 4 months.

A discount of 5 per cent will be allowed on above prices for full cash. No subscriptions received for less than 100 shares.

Make checks payable to the New Amsterdam Securities Co. Send subscriptions by draft, express or post office order. [illegible] use registered mail only.

INQUIRY COUPON.

Fill out this Coupon and mail to New Amsterdam Securities Co., 3rd Floor, Flatiron Bldg., New York, N. Y.: Kindly send me your prospectus and full particulars regarding the stock of the "HAPPY JACK" COPPER MINING & DEVELOPMENT CO.

My Name is ....

City ....

State ....

FIG. 3.—A Type of Get-Rich-Quick Advertisement

the initiative when they suspect a fraud is being perpetrated. They contend that more pressing duties occupy their time and they cannot afford to investigate all the investment propositions as soon as they make their appearance. They, therefore, wait until a complaint is lodged with them before bestirring themselves, and in most cases a swindle has by that time gone too far and the greater part of the mischief has been perpetrated before some victim has become suspicious enough to lodge a complaint.

As far as some of our powerful newspapers are concerned, it is unfortunate that their morality is no more than a cold business morality. Some of the publishers maintain that their readers must exercise their own intelligence about the investments offered in the advertising columns. They say they do not recommend them. They require and desire the large revenue derived from illegitimate financial advertising, running into the thousands every year, and are perfectly willing to salve their consciences by assuming a lack of knowledge as to the real character of the propositions offered. Figure 3 is an example of such an irresponsible advertisement.

A prominent government official has severely arraigned the newspapers which accept this class of advertising for their share of the guilt in the annual loot which the dishonest investment scheme takes from the public. He has charged that these swindles could not exist without the co-operation of these newspapers. But this is not entirely true. The liberty to use the mails for the distribution of prospectuses, literature, and letters is equally responsible for their existence and success. If the newspapers were not as accessible as they are, these schemes would still be carried on through the mails.

If it were possible, without encroaching upon the

liberty of the press and the use of the mails, to bring about an intelligent co-operation between the newspapers and the postal authorities to surround investment propositions with proper restrictions, there can be no question that the harm they do could be materially curbed. Even then unsuspecting and uninquiring investors could not be wholly protected against their own ignorance. There is but one way for them to guard themselves against outright swindles, and that is by the exercise of a little common intelligence.

The brief investigation before investing will, in the majority of instances, save the investor his money. But the usual practice is to invest first and investigate afterwards. At least this tendency is shown by my experience in correspondence with investors who have bought doubtful securities. I purpose here to outline some of the essential factors relating to every enterprise about which investors should fully inform themselves. If they follow the course laid down, there is little chance of their being duped by swindles.

Nature of the Enterprise

It is important to consider seriously the nature of the enterprise. If its basis is sound, the prospect is good for its success under a capable management. This may be determined by a comparison with undertakings of a similar character, by which it can be shown if they are profitable elsewhere. Competition is also an important factor to consider. What sort of competition will be met with and what degree of opposition must be faced? Has the enterprise peculiar advantages over others in a similar line? This should be brought out, as well as all the advantages indicating that the enterprise can be profitably conducted under existing conditions. These are

the general problems to which investors would do well to give serious consideration.

The Plan of Organization and Control

When one is satisfied in this regard, the next step is a careful examination of the plan of organization. Corporation laws differ. Some states are more liberal than others, some even going so far as to invite the incorporation of enterprises by loose laws, none of which is for the benefit of the stockholders.

The corporation laws of some states are so framed as to vest the management of a corporation with such discretionary power and secrecy that it works the greatest harm to the stockholders. The stricter the laws under which an enterprise is incorporated the greater are the interests of the stockholders safeguarded. The amount of capital is very important. The more reasonable, the greater are the chances of success. No less important is the manner of the issuance of the stock. Has it been issued in whole or in part in return for the property turned over by the incorporators? If so, in what proportion and for what property? A knowledge of this will throw some light upon the question whether the money of investors will be used for the legitimate development of the enterprise, or flow into the pockets of the promoters.

Is the stock offered for sale full paid and non-assessable? It is the law of some states that stock bought for less than its par value places on shareholders the liability for the difference in case of insolvency. Suit can be started by the creditors for the recovery of the difference. Corporations evade this statute by turning over the assets for the shares, in this manner making them full paid non-assessable. Part of this stock, if not the

whole, is then put into the treasury to be sold to secure working capital. It should also be determined whether any of the stock has preference and of what this preference consists. Foreknowledge in this respect is a security against any surprises. By knowing what stock, if any, remains unissued and held in the treasury, one may tell the sources of new revenue open to the corporation, as new capital can be raised as it is needed by the growth of the business. A copy of the by-laws should be examined carefully, as from them the prospective shareholder can determine the extent of the powers vested in the officers and directors of the corporation.

Who has the stock control? The character of the men is so important that it can either make or break a corporation. In their hands rest the rights of the smaller stockholders. Are they men whose past conduct in the management of corporations is such as to make it certain that the rights of the minority shareholders will be fully maintained? Finally, in the plan of organization are there any unusual features in the charter of the by-laws which may be employed in the future to the detriment of the stockholders?

Present Condition of the Enterprise

An examination in this respect can be divided into three classifications: first, of the property; second, of operation; and third, of the finances.

THE PROPERTY

To begin with the first, has the property any value and how has the value been estimated? The answer to this inquiry will determine the measure of conservatism or exaggeration back of the enterprise.

If the properties or rights are owned outright, the more

certain is the foundation on which the enterprise is being built. Less assured is the future where the properties are held under lease, license, grant, option, or otherwise, for the failure to comply with some terms is liable to break the contract and result in the loss of the property. If the property is owned outright, the titles should be perfect. If there are any encumbrances on the properties or rights, the investor should know it, and what the amount is. If they are not owned outright, the holding papers should be in proper form and it ought to be known also if the holding terms are reasonable, satisfactory, and safe.

With this knowledge some idea ought then to be formed as to what the property is likely to bring in case liquidation is forced; with all these facts before the investor, he can form an intelligent conclusion regarding the present condition of the enterprise.

THE OPERATIONS

Coming to the second consideration as to operation, the first thing to be answered is: What have been the operations up to the time when the investor is asked to purchase the shares? Then, what have been the results and to what extent have they proved profitable? Another fact to ascertain is whether difficulties have been encountered, and, if any, their nature. Find out about the demand for the product or the operation of the enterprise and what is its present status financially, as well as physically. Then, are the books properly kept and are they open to the inspection of the shareholders?

THE FINANCES

The third consideration, and one which relates to the very heart of an enterprise, is the state of the finances.

First, there are the assets as they exist—their character and their actual value. At least, an investigation of the assets will guard against a later discovery that they are mostly of paper value and not real. It is important to have a clear knowledge regarding the debts, claims, fees, rents, royalties, or other payments or obligations due and which must be met.

When this is known, the next step is to ascertain the resources available, out of which these debts are to be paid. Who handles the money and what safeguards are provided to prevent improper disbursements? It is also important to know what, at present, the running expenses are and what they are likely to be, including the salaries of the officers and managers, to ascertain whether these important outlays are upon a conservative basis.

Officers and Directors

Then there are the directors. Who are they? What is the past record and present business standing of each? Who are the active members of the board? Who, if any, are inactive? Are the meetings held regularly and are they fully attended? Who compose the executive committee, if any, and what are their powers? Above all it should be ascertained if the directors are stockholders to a material amount. It is but reasonable to suppose that if they are financially interested in the prosperity of a corporation, they will be more conservative in their management.

Who are the officers? What are their previous records? What are their special present qualifications? Are they able to work together without friction? What compensation do they receive or are they to receive, and are they interested in the enterprise beyond their salaries?

What is the general plan of operations they have mapped out for themselves and what led to their adoption?

Some General Questions

With a clear understanding of these matters, there still remain some general features which should be thoroughly investigated. Serious consideration should be accorded to the previous history of the enterprise or the property or undertakings on which it is based. If inventions enter prominently, what is the previous record of the inventor? By whom are the statements made, and is the person making them reliable? Finally, are there any contracts or obligations not now effective by which the enterprise may subsequently be affected?

With all these facts before the investor and carefully considered, he is at least assured against falling a prey to every financial sharp. Neither they nor their enterprises could furnish a clean bill of health where probed by an examination as thorough as this. While they are by no means a complete assurance against loss, since an honest enterprise may meet with difficulties, they do raise sufficient safeguards against downright dishonesty. In conclusion, it may be said that the investor should demand, before parting with a penny of his money, a complete financial statement, including item by item the assets and the liabilities, the earnings and the expenses, of a going concern.

In another section, a specimen statement is submitted to demonstrate how figures sometime can be made to lie in a way to do credit to a Baron Munchausen. If investors will conduct an investigation such as has been here proposed, there will be very few who will, if they exercise a little bit of intelligence, have cause to complain

that they have been victimized. They will have locked the stable door before the horse has been stolen.

Swindlers operating in the financial field are unable to reply properly to all these questions, and even if they should their answers would not hold together well. Discrepancies would show themselves here and there so glaringly as to eliminate at once their proposition from the consideration of intelligent investors.

It is possible to deceive a person with one lie, but a half dozen or more lies will not stick together. In fact, conservative bankers employ this searching investigation to determine to their satisfaction the character and possibilities of an enterprise proposed to them to underwrite its securities. If they depend upon this information, why should not investors?

TEST QUESTIONS

1. What is the estimated annual loss to American investors as a result of predatory finance?
2. Why do these losses occur?
3. What factors should a prospective investor consider about the nature of the enterprise in which he contemplates an investment?
4. Why is it desirable to investigate the plan of organization and control?
5. What three factors should be considered in regard to the present condition of the business?
6. Why should the investor consider the officers and directors of the enterprise in which he contemplates to place his money?

CHAPTER XVIII

THE SCIENCE OF SPECULATION

ECONOMIC BASIS OF SPECULATION

The German economist, Cohn, has given us one of the most accurate and satisfactory definitions of speculation. He defined it as "the struggle of well-equipped intelligence with the blind power of chance." It is a fundamental economic principle that all productive industry involves a certain amount of risk. This results from the great specialization in industry, the creation of world markets, the vast time which elapses between the performance of the labor and the final utilization of the products, and the uncertainties of nature herself. Risk is an integral factor in business.

The rise of any new factor in industry causes the development of certain agencies and agents to perform the duties connected with them. The use of credit in business accounts for the existence of the modern commercial bank. So likewise, the factor of risk as a fixed quantity in modern industry has called into service the broker and the speculator, who form a distinct class to assume this work and burden. Commercial speculation is but a contract based upon risk, much as an insurance contract is based upon risk. Each is recognized as a beneficial contract when properly used. Speculators do not determine prices; they simply express their judgment upon what prices will be. The transactions of speculators reflect

their judgment of the business outlook, not their wishes. Through their transactions they bring to the knowledge of the producer and the distributor all facts which are necessary to arrive at the intrinsic value of their product measured by the supply and demand. At the same time, organized speculation offers national and international markets for the exchange of goods and securities. Speculation as an institution is entitled to public support so far as it contributes to public welfare.

Call it what you will, speculation will always be with us. Prudes may frown upon it, superficial thinkers may confuse it with the commonest forms of gambling, and sociologists may dream of the day when envy, ambition, and covetousness will be a thing of the past and the human race can exist in peace without these human traits, but their agitations and outcries can no more check speculation than human ingenuity can devise a scheme to control the tides.

What the blood is to the human body, speculation is to business. It is absolutely a necessary part of it. The only difference, if there is a difference at all, is in the form it assumes. What would business be without incentive? And incentive is all there is at the bottom of speculation. Men are willing to take risks to acquire wealth. They are willing to stake their capital upon opportunities which appeal to their judgment.

Everyday Speculation

From the pioneer who heedlessly plunges into a trackless waste to find a new home with greater opportunities for the acquisition of wealth, to the modern capitalist who, to control the trade in a given commodity, plans gigantic trusts, is a long line of speculators, as speculation is behind all their ambitions. The inventor who is,

apparently, of all men the least of speculators, takes greatest speculative chances, for he uses up time and energy to shape his ideas into some form where they can be of practical use, and should he fail has wasted them utterly and lost all.

Illustration after illustration could be given to demonstrate how speculation in a greater or less degree enters into the material welfare of each individual.

Without speculation no business could progress. It is the dynamic power behind every incentive to activity and progress. It is the desire for gain which prompts the inception of every venture. If it is all that, then it can be readily seen how necessary speculation is. In fact, speculation in its highest form has shaped the course of history and often changed the map of the world.

International Significance

The discovery of America by Columbus was accidental; the real purpose behind his venturesome journey was to find a shorter route to India. After he found a new hemisphere, his discovery inflamed the spirit of conquest among numerous intrepid explorers, few of whom set out upon their expeditions with any thought of planting their country's standard over new territory for the mere sake of fame. Most of them went hunting for new treasures and to expand the commerce of their nations. Cortez was only a looter. He and his soldiers despoiled Montezuma and the Incas of their treasure for his king, himself, and his men. Pizarro followed the same course. The Indians, our real Americans, were not originally blood-thirsty savages, but a peaceable race of primitive men who welcomed the appearance of the white men among them. Their friendship was only turned into hate when they began to realize that the white man came

among them solely to wrest their land and possessions from them.

Behind most wars among nations there is the commercial instinct. This is but another form of speculation on the grandest scale. It is a rivalry for acquisition between nations instead of between individuals, and this rivalry rises to a point where it arouses the martial spirit of a race to acquire by force of arms what cannot be secured by peaceful measures.

Were it not for the rich diamond mines at Kimberly and the gold mines of Johannesburg in South Africa, there never would have been such a historical event as the Boer War. It was not an insult to English pride which prompted John Bull to spend over a billion dollars to humble the hardy Dutch nation under Krueger; the possession of the rich mines was the real goal. But once the conflict was on, national pride forced the English nation to carry it to a victorious end, whatever the cost. The same cause, the retention of India under the British flag, brought about the Sepoy mutiny.

Going back further into the history of England, the loss of her American colonies is directly traceable to the greed of her capitalists. Out of their enlarged opportunities they wanted to get all they could, despite the danger of trespassing by their heavy exactions upon the peaceable nature of the colonists. The tea tax was the spark which set aflame the American revolution. The tax could not be construed as a patriotic measure. It was a scheme for material aggrandizement. George III, to enrich the exchequer of his nation and indirectly the personal fortunes of his subjects, attempted to do it by forcing the colonies in America to pay his country a greater tribute. By his efforts to lay hands on more money, England lost an important colony. What, then,

was this war, when stripped of all its romanticism, but the result of speculation? It was a case of a nation's greed overstepping itself.

The same factors were evident in the late war between Japan and Russia. Patriotism and national pride had no share in bringing about this conflict. Rich Manchuria and the possession of Korea, which also meant the dominance over the commerce of China, were at the bottom of the conflict. Japan wanted this enormous business. Russia was equally covetous. It was therefore inevitable that the friction between the two nations, wholly the outcome of their commercial expansion, could be settled only by war and the prize fall to the victor after sacrificing many hundred thousands of lives and piling up a huge war debt for each as a heritage for many future generations. And so it was in the great European conflict which was precipitated in August, 1914. It was perhaps even more openly commercial than any of the wars mentioned.

What is true of nations is true of individuals also. They seek greater opportunities to make money. Between individuals their interests when they conflict are fought out in the arena of competition. The mastery falls to those who are the shrewder and more aggressive contenders. Yet beneath the outward semblance of competition is the greater force—speculation. We cannot get away from it. Wherever we turn we are brought face to face with it.

Speculation in History

By no means, either, is speculation in any sense a modern force. It is as old as the human race. Only when the human race no longer exists will speculation become extinct.

Our own Bible brings down to us the tradition of how Joseph bought up all the wheat in Egypt because he shrewdly detected there would be a famine in the land. What was this but speculation? In reality Joseph was the first man we know of to corner wheat. Nowadays men speculate in the same cereal. They watch the weather map carefully and spend considerable money each year gathering statistics in an endeavor to form an idea as to the extent of the harvest. As they form their opinions they trade in the wheat long before it is out of the ground and ready for the market. They buy if they believe the crop will fall short, to resell it later at a higher market price, or if, on the other hand, they arrive at the conclusion that the crop will be plentiful, they sell it in anticipation of a decline in the price expecting to reimburse themselves from the difference in the price they agreed to deliver it for months previous to the harvest. If they are mistaken in their judgment, they, of course, are out of pocket. The only difference between their trading and that of Joseph is that whereas he bought the wheat outright, they deal in contracts without ever seeing the cereal.

Guglielmo Ferraro, the great modern Italian historian, in his fascinating history of "The Greatness and Decline of Rome," gives a very interesting account of how speculation was at the bottom of most of the conquests of the Roman legionaries over the barbaric nations, and to many it may be exceedingly interesting to know that for nearly a century before the birth of Christ, the Romans were already buying shares in large land operations which were carried on throughout the colonies of Rome. So even the buying of shares, regarded as a modern evolution, is by no means new.

Lucullus, Rome's first great expansionist, inaugurated

the fashion. His conquest of Mithridates first opened the eyes of the Romans to the luxuries and refinement of the East. The talents and sesterces he brought back to Rome incited in the Roman aristocracy the lust for greater conquest. The rich money lenders were prompted to finance the expeditions and the ambitions of the Roman war lords. Pompey conquered other nations, turning over their rich lands to the powerful Italian land operators, who in turn invited the smaller speculators to join them in their extensive operations. Caesar continued Rome's policy of conquest in Gaul and Britain. Behind all his wars was the sordid object of enriching himself and his followers with the tributes exacted from the smaller and weaker tribes which his legions subdued —all for one object, to extend the wealth of Rome, to give the speculators a greater field for their operations.

Thus it is seen that we have many historical precedents to justify speculation. More than this, they indicate that behind each step of progress the human race has made speculation has been the impelling force and modern conditions have changed it but slightly.

Certainty in Speculation

What, however, is the science of speculation? We often hear of this appellation being applied to it. Roughly speaking, to me there does not seem to be anything like a science of speculation, in the ordinary sense of the term, beyond a few general though uncertain rules. There is a science of chemistry. The knowledge gained of it can be verified by exact observation. Certain conclusions can be demonstrated beyond peradventure by the exact result which an investigator sets out to obtain. There is an exact science in astronomy, in medical research, in geometry, in meteorology, and in metaphysics. Knowl-

edge of laws and rules must first be acquired to prepare a person to undertake investigation in these sciences.

But I should like to ask how any course of study in speculation could be outlined on which reliance could be placed. Familiarity with the objects engaging one's speculative instincts is, of course, absolutely essential to success. A general knowledge of conditions helps considerably when coupled with a keen perception of their probable effects, but as these conditions constantly vary, there is no way by which a knowledge of them can be verified by exact observation.

Possibly you have seen at some time or other, a chart indicating the trend of the stock or grain markets. A piece of paper is squared off in blocks, each row representing a cycle of time, usually a year, and across these blocks there will be a wavy line running either longitudinally or perpendicularly. This line is supposed to trace the trend of prices. Figure 4 shows a chart which might be used as a powerful argument for always buying May wheat in September. Such charts have many followers who foolishly believe they can replace judgment with a greater degree of accuracy. But they more frequently go wrong than right. They might be accurate guides were similar conditions always present; the charts would indicate a recurrence in a swing in prices upward or downward as the case might be, but this is not always the case, fate having a strange inconsistency in bringing forward unexpected events which wholly change the course of human expectations.

It does not follow that a system of charts or diagrams based upon business fundamentals and currently revised with intelligence and discrimination may not serve a useful purpose. In fact, economic science and statistical work of various kinds are gradually making possible the

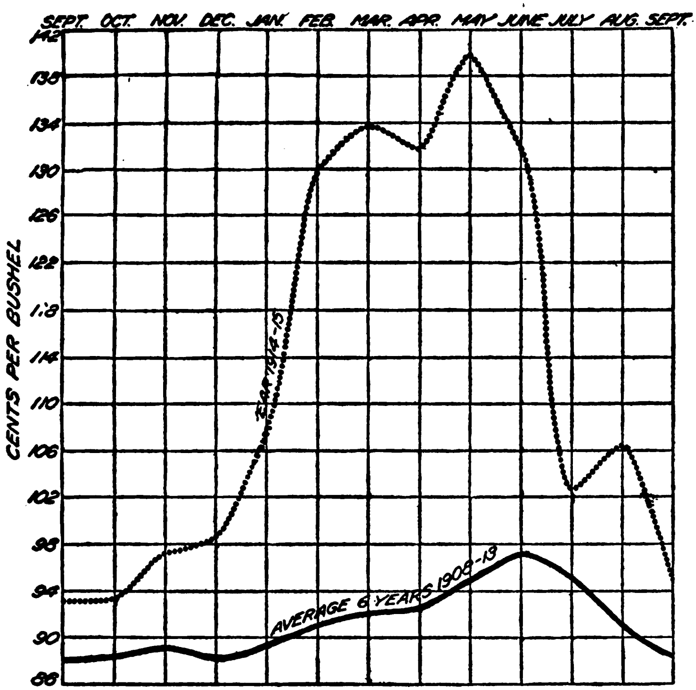


FIG. 4.—Chart Showing the Average Price of Wheat

compilation of information possessing great value. No system of charting or of presenting such information can, however, entirely forecast the unexpected events.

PANICS

Previous to the sharp panic of 1907, the consensus of opinion among our great millionaires who accumulated their vast wealth as a result of the unusual period of prosperity which set in with the election of William McKinley as President, was that the country had not yet exhausted the good times. Shrewd men like Henry H. Rogers and William A. Rockefeller were confirmed bulls on the

country and backed their faith in much higher prices for the leading securities listed on the New York Stock Exchange by accumulating vast blocks of shares.

According to the signs of the charts, their position was correct. The flood tide in the prices of stocks had not been reached, although there were many signs pointing to a break in prices in the near future. But a fatality occurred which rent asunder all their well-laid plans and involved them in huge losses. The panic of 1907 came heralded by few of those advance signs which in the ordinary course of events cast their shadows before the eyes of shrewd students of conditions.

The fatality which precipitated in the United States the great world crisis of 1906-1907 was the San Francisco earthquake. It came like a bolt from a clear sky. The destruction of over $200,000,000 of actual wealth proved like a vacuum bursting, in which money required elsewhere had to rush in, to mitigate human suffering and prevent the total ruin of fortunes invested in the stricken city. It found the credit structure of the moneyed centers in the country in a vulnerable position. No money in large volume could readily be spared within so short notice without withdrawal from other channels, and as the necessity was most urgent, sacrifice had to be made by letting go the more quickly salable assets, which were securities. The earthquake caused the panic; that was unexpected.

Few people would have believed in the early part of 1914, that a great European war would break out before the end of summer, a war that would paralyze the world's commerce, bring trade to a standstill, compel the banks to resort to clearing-house certificates, and for their own protection force many of the nations to declare moratoriums, to save themselves from bankruptcy.

Another indication that there is no accuracy to speculation is the explosion of the theory regarding the recurrence of panics. For some years we have held to the belief that between panics an interval of about twenty years elapses. But of late, money panics have occurred with greater frequency. From 1900 to 1910 there were two panics, varying in degree of intensity.

If it were at all possible to gauge accurately beforehand the years in which we are to see great prosperity and then adversity, there would be hardly any necessity for the exercise of the keener perception upon which successful speculation must depend for a profitable fruition. Nothing would be needed but to watch for the unfailing signs and then trim sails accordingly.

Another fallacy we often fall into, is the belief that a panic in Wall Street is a localized affair and cannot disturb the prosperity of the country. We have seen an impression akin to this during 1907. Other parts of the country were confident they would not feel the effect and the press was particularly concerned in pointing editorially to reasons explaining and emphasizing this view. But it was not six months before the entire country was in the grip of the depression the panic superinduced. In a few months the banks in the large interior cities were forced, because of the scarcity of money, to resort to clearing-house certificates as a measure to relieve the stringency. The federal reserve system under wise administration and intelligent co-operation on the part of bankers makes an old-time financial panic less likely—one might say, almost impossible. The wise investor, however, will not rely too implicitly on a system; he will consider fundamentals.

Money has its capital centers in each country. As money is the basis of credit and is also the life fluid of

business, it cannot be otherwise than that the prosperity of a country will be disturbed and checked when there occurs a panic in the principal money centers. Then a condition of atrophy is brought about. Business receives a swift check, almost always unexpectedly, and when it is least prepared for it.

Sometimes a panic is brought about by the most unusual occurrences. At times it comes by the most unexpected happenings, and the direct cause will always be found in the over-extension of speculation.

One instance I have in mind is the sudden death of Governor Roswell P. Flower, who was a great market factor and who, because of his unusual success as a speculator, had behind him a great following in the securities in which it was known he was most largely interested. His death, overnight, paralyzed his following. They were thrown into a panic of fear by the sudden loss of their leader. What were imposing fortunes the day before were swept away as if by a tidal wave, and in place of the wealth there was ruin, on the day following, to thousands of speculators, caused by the sheer and heartsickening decline in prices of securities.

Another similar case of the unexpected, but this time not from the death of a great financial captain, was the memorable flurry in Northern Pacific stock as a result of the titanic struggle for control of this important railroad system between E. H. Harriman and his banking ally, the great banking house of Kuhn, Loeb & Co., on one side, and James J. Hill, backed by no less a banker than J. Pierpont Morgan, on the other. Northern Pacific shot up to $1,000 a share. Were it not for a private settlement on the price after peace was again restored between the two rival factions, the financial district would have been a mass of wreckage, since but little of the stock sold under

contract to deliver next day was obtainable, as the control was held tightly by Hill and Morgan.

Jay Gould's efforts to corner gold, when gold in Wall Street was still something of a speculative commodity and there was a room in the stock exchange set aside for traders in it and known as the Gold Room, brought Black Friday, one of the blackest days in our financial annals.

These illustrations will confirm the contention I make that it is the unexpected which changes the course of speculation. It is the unexpected against which no precaution can be taken. To the lay mind it will be somewhat puzzling how the effect can be so ruinous. With a little clearer knowledge in the rough of how speculation is carried on it will be more readily understood.

Influence of Panics on Margin Trading

Most speculators do not buy outright, that is, with their own money. They usually operate on margins. That is, they buy a block of stock, it may be wheat, cotton, or something else, through a broker, paying a certain percentage of the purchase price and leaving it to the broker to arrange a loan with his bank for the balance. On this balance the speculator pays interest.

As the stock declines he is forced to protect his equity in the stock by putting up more money or margin, and if he has not the capital or comes to the conclusion that the decline will continue and does not care to run the risk of further loss, he sells out or is sold out, the bank liquidates its loan, the broker deducts his commission, and if there is anything left, the speculator gets the balance. If he is in debt beyond his margin he must make the difference good. But it seldom reaches this point, as the loans made are carefully watched and closed before the lender's margin is exhausted.

In panics, or when the unexpected happens, the change in prices occurs so swiftly and suddenly that often the speculator has no time to protect himself before his loans are liquidated. As for the outright holders of securities, they are driven by fear to unload to prevent further losses. In such times securities are recklessly thrown upon the market from all sides, and prices smash.

TEST QUESTIONS

1. What is the economic foundation of modern organized speculation?
2. Can speculation be eliminated from the world's business by mere agitation against it? Why?
3. Show how speculation is a strong factor in international diplomacy and war.
4. Give some examples showing the prevalence of speculation in early historical times.
5. Why is it impossible for statistical charts to predict future events to a certainty?
6. To what extent are such charts valuable?
7. Give examples of some unexpected events which even the shrewdest speculators had not allowed for in their calculations.

CHAPTER XIX

EFFORTS TO PREVENT SPECULATION

Nature of These Efforts

There breaks forth periodically from prudish but well-meaning people a protest against all forms of speculation in stocks or commodities. Appeals are made regularly to the legislative arm of the Government to put a stop to speculation through the enactment of repressive laws. These outbursts of public temper usually arise out of a speculative debauch or result directly from abnormally high prices, which speculators are charged with bringing about.

These outcries are typical of restless human nature. The public as a whole sometimes acts as one big machine, permitting itself to be propelled unthinkingly hither and thither by some forceful leader or set of agitators who momentarily have caught the popular fancy. These risings are sometimes successful and laws to curb or wholly suppress speculation are framed.

Nor is this tendency peculiar to the American people, who are, anyway, a cosmopolitan nation made up of many races. It breaks forth among the peoples of other nations. The Germans, stolid as they are, rebelled against the speculation in grain, declaring that it enriched only the millers and placed a heavy burden upon consumers. A great outcry arose in Holland following

the insane speculation in tulips centuries ago. England felt the clamor frequently and most pronouncedly after the collapse of the South Sea Bubble, while France was rent with the protest of the populace against speculation twice, in a way to become historic: the first time, when John Law's grandiose Mississippi Bubble burst, and the other, when the De Lesseps Panama Canal scheme smashed.

With us, hardly a year passes but that there are introduced either in Congress or in the assemblies of our different states, laws to stop margin-trading, as speculation in stocks is called, or dealing in options, either in grain or cotton. But up to the present time no laws have been enacted to interfere seriously with speculation. Our more sober intelligence has so far checked any attempt to construct bars against a practice which serious thinkers realize is the very incentive of our material progress.

Germany once succeeded in stopping speculation in grain. The farmers and the consumers soon felt, as a result, that the burden fell upon them and not upon the traders, who formerly dealt in this commodity on the bourse. Without a public market on which a price for their grain could be made through free and open bartering, the farmers had to sell for any price they could get and never knew whether the price was standard. The millers had the price-making power for flour wholly within their control. It was not long before the Germans were as anxious for the restoration of trading in grain on the bourse as they had been a few years before to put it down by force of law.

Intelligent speculation is no crime. It is not gambling. It is merely pitting human shrewdness against the uncertainties of the future. For that matter, life itself is a

speculation in which ministers, prudes, and agitators hope to avoid sickness and accident and live their allotted span of life. Between speculation and gambling there is as much difference as there is between night and day. Speculation commands the exercise of the greatest measure of acumen, where gambling trusts chiefly to luck and the turn of a card. The ultimate distinction between gambling and speculation is based on ethical and economic considerations. Society generally condemns the former because in its judgment the gains to the successful gambler far from compensate the harm which results to those who lose. Gambling is condemned because it serves no useful economic purpose.

Experience has demonstrated far too convincingly that wherever speculation has been leashed by the iron bonds of the law, the effect has been almost an immediate stoppage in the material progress of the country. Market places where average prices are created are destroyed, which in itself is a great detriment, as the sellers cannot know whether or not the buyers are paying them a fair price for their products. The price-fixing policies and the commandeering of supplies resorted to by the European countries during the great war did, of course, limit speculative opportunities, but those examples do not prove by any means that governments can successfully maintain such economic policies in normal times.

Almost Everyone Speculates

A man believes that a corner store in his neighborhood is a good location for a dry goods business. He leases the store for a year or a term of years at a good rental. He contracts for a large bill of goods. He has his store substantially fitted out. In fact he has invested considerable money in his enterprise and made himself liable to

wholesale merchants for a stiff bill of goods, before he has even sold a paper of needles, all because he has arrived at the conclusion that the location he has selected for his business is favorable for the development of a good trade. No one would dare charge him with speculation. If anyone did so, the man would be regarded as a hare-brained crank. Yet the storekeeper is speculating just as much as if he had bought so many shares of a stock whose earnings would justify the belief that there would be an enhancement in value. If people failed to patronize his store, and if sales were insufficient to bring a profit, he would have to suffer losses represented in the difference between what this stock cost and what it brought, and his loss of time and rent until he could rent the store to someone else before the expiration of his lease.

Fond parents, when they send their children to college to acquire an education to fit them for their struggle of existence, may not realize that when they invest their money upon the education of their loved ones, they are speculating upon the children's using the opportunity properly. Their boy or girl may absolutely waste the opportunity in frivolities and leave college even less fitted for life's battle than other young people whose parents' circumstances were such as to make it impossible for them to obtain a college education.

A tailor cannot tell when he is laying in a stock of woolens whether they will meet the public taste. He depends entirely upon his judgment when placing his orders, which he does months before the season has set in. Is he not speculating?

Why, even the grocer speculates when in the early morning he drives his wagon to the market for his daily supply of greens, vegetables, and dairy products. So

does the butcher in his trade. He figures that his regular patrons will order a certain supply of meat. He also knows that if they fail to do so, what is left over must be made good out of his daily profits.

When the farmer tills his soil and puts it to seed in the spring, he speculates, does he not, on a favorable outcome of his harvest? Not only does he speculate but long before the time has been reached to garner the fruits of his season's toil, he has already pledged part of the harvest for loans at his bank, depending entirely upon his crops to take them up.

Human endeavor, whichever way it is directed, largely speculates upon a favorable outcome. The manufacturer invests considerable money in raw products to turn into finished articles, and in labor, counting upon a steady demand from consumers for his profits. If he needs money, he borrows from the bank, expecting to repay the loans from his sales. The wholesale merchant, whether he deals in dry goods, coal, groceries, jewelry, or the dozen and one staple commodities, does the same and assumes the same risk, pitting his judgment against the future.

In going into these minute details, I merely attempt to show what a misconception exists regarding speculation. The critics take the shadow for the substance and hold the substance responsible for the evil effects of the shadow.

If a man fails in speculation and is ruined in consequence, he is pitied and speculation pilloried before public opinion as a crime.

If he fails in business as a result of misjudging his opportunities, he is not pitied, but condemned as an incapable business man, although underlying both misfortunes there must have been the same cause, a greed to

bite off more than could be cared for, or greed to acquire a fortune quickly, even at the risk of rashness.

There are any number of people who buy real estate or farm lands every year, knowing full well they have not the money to purchase them outright. They make their purchases subject to the encumbrances or mortgages already standing against the property. What money they pay out is for the equity and nothing else. They are confident of their ability to care for the interest on the mortgages. They expect their equity to increase in value sufficiently to enable them to turn over their property to some other buyer at a good profit.

Even the more humble wage-worker does this when he buys his home on the installment plan from a builder, who himself, to construct the house, has already plastered it with a mortgage to his bank, the interest on which mortgage the wage-earner must pay in addition to paying off the equity in easy installments.

In each instance, the buyer is buying on a margin, exactly as he would buy on a margin certain stocks or certain quantities of grain or cotton. Someone else lends him the money on the unpaid balance of which he pays interest. Yet some people hold the open trading in margins to be wrong, to be gambling, while they hold the purchase of real estate on part payment and financing the remainder by a loan to be a legal and ethical transaction. If the one be wrong, the other is also.

Moreover, there are as many failures through over-extension in real estate operations as in stock speculation. As many people have their property sold through foreclosure, because of their inability to meet their interest, as have their speculative commitments in stocks closed out through inability to provide more margin.

Evils in Speculation

The evil in speculation is not in speculation itself. Where it arises most is through ignorance of conditions. Unscrupulous brokers and mercenary "tipsters" are to a large degree responsible for the odium so frequently heaped upon speculation. They tempt people into the whirlpool, where the most acute judgment must be exercised. These dupes have no knowledge of the principles of speculation, but the operator drags them in by appealing to their greed and cupidity. They are told what great fortunes are made on a few hundreds or thousands. They are induced to over-extend themselves until the movement of a few points against them completely wipes them out. The most festering sores on speculation have been the bucket-shops. Their gain lies in the losses suffered by their patrons. The more they can shake out, the greater the profits; therefore it was at all times to their interest to tempt their customers to operate on slim margins. Fortunately, these concerns, which were no more than gambling shops as they very seldom bought securities outright, and in which speculation was reduced to guessing on the day-to-day fluctuations and not infrequently from hour to hour, have now been driven out of business by most of the states. Of late the United States Government also has taken a hand in extinguishing them, as it can well do since their existence depends upon transacting most of their business through the mails.

However, equally mendacious is the "tipster," the advertising tipster, who brazenly proclaims in large type that he is in a position to tell beforehand certain movements in securities. These charlatans succeed in garnering a harvest of ignorant and greedy victims who, with a childlike faith, swallow their statements in absolute

confidence and plunge blindly into buying the stocks recommended to them as about to jump many points, only in the end to lose all their money. It is paradoxical that some people will believe such stories coming from strangers, but, when it comes to business transactions with which they are familiar, are as shrewd in their bartering as the chief character in "David Harum." A notorious tipster's advertisement is reproduced in Figure 5.

The average person does not stop to think that if these tipsters were so certain of success even in a tithe of their supposed information, they could make in a night a fortune large enough to place them above want for the rest of their natural lives.

These impostors of the financial centers have contributed largely to the disrepute which speculation occasionally falls into in this country through the laxity of the authorities, who, it seems, might find some way to drive them out of business.

There are also the so-called "financial geniuses" who have devised a system of reducing speculation to an accurate science, who by charts or other devices, claim that they can accurately gauge the fluctuation in prices so that there is no risk whatever. Scheme after scheme of this character has been launched, each one finding some following, at times large, at other times but a beggar's guard of embryonic speculators. Some have been put forth by sincere fools; others by outright crooks who know only too well how to attune their plans to the credulity of the public. But none ever succeed. One by one they go to pieces, leaving in their wake a train of victims. It is true that some of the better and more recent barometric charts are at least valuable records of past conditions, and to this extent are useful in enabling intel-

No faith in Tipsters, but————!

Here's a singular letter, just received from a Pittsburg operator, which is rather illuminating:—

Dear Sirs—After taking "THE ———— ———— for 2 months I now enclose check for $100 for six months' service. I never had any use for tips or tipsters, and the tips in your letters do not interest me, although I admit they have an astonishing habit of coming true. But the reason I find your service of value is because that, by paying you a few dollars a month (a hundred one way or the other in Wall Street doesn't amount to anything if you beat the market) I have the benefit of getting every day what I recognize as an intelligent deduction from the market movements of yesterday and an accurate opinion of the market for to-day. I am a moderately successful speculator. I don't do anything else, and started, years ago, with only a dollar or two capital) and have spent a good deal of effort and a few hundred dollars looking for just such a letter as yours, and, as you know, I like to avail myself of the privilege of talking with you by 'phone occasionally. That 'phone service of yours is O. K.

I am going to drop in on you the next time I'm in town. I want to look you over. **ANYBODY** can beat the market with your service, and why you didn't "get yours" long ago, and retire, puzzles me. If you know anything about Pittsburg you know that when we fellows can't understand a thing we study it until we do.

With the season's best wishes. Yours very truly.

The man who wrote the above is credited with being worth a half million, all of which he took out of the Street. He says that **HE** never takes a tip, but perhaps **YOU** might profitably take **HIS**.

WHAT IS A BULL MARKET?

"THE ———— ———— is frequently asked, "Do you think this is a bull market?" When intelligent individuals can ask such a question, with prices holding firm within a few points of the top of a 30 to 100 point advance extending over a year's period, it is evident that, to some people, "A bull market" means only the few short weeks preceding the **CULMINATION** of a bull market—that short day of delight for the lambs when the pit is being digged for their extinction. There are those who say "The market is doing nothing; I'll wait till they start." While these are "waiting" "**THE** ———— ————" subscriber is piling up profits in **WABASH COMMON**, which he bought around 20½; **THIRD AVE.**, which he bought below 13; **WAB. PITTS. TERM.** 4's, which now show advances of 12 to 14 points. **UNION PAC.**, and **SO. PAC.** on the recent decline which he bought around 201, as well as **TWO OR THREE OTHERS** in which the present advance is only the preliminary to what is to follow.

We have received communications the past week from nearly a score of subscribers whose December profits run into the thousands, and we shall make it our business to see that their **JANUARY PROFITS** break all records. We're going to have **YOUR** kind of a market—when they all move together and gain from 2 to 5 points daily—but the **SAFE MONEY** is to be made now, by getting these special movements as they present themselves.

For Instance:—

THERE'S A MOVE BREWING TO-DAY IN AN INDUSTRIAL STOCK SELLING SO LOW THAT 3 POINTS WILL COVER THE INTEREST CHARGES FOR AN ENTIRE YEAR. THIS STOCK MAY BE BOUGHT TO-MORROW WITH THE SETTLED CONVICTION THAT AN ADVANCE OF 14 POINTS IS INEVITABLE AND THAT A 5 POINT MARGIN WILL SCARCELY BE ENCROACHED UPON. THIS IS ONLY ONE—THERE ARE OTHERS, AND THEY'LL ALL HELP TO SWELL YOUR BANK ACCOUNT VERY SUBSTANTIALLY DURING THE NEXT FEW WEEKS.

THIS WEEK'S MARKET.

Some of the expected New Year's advances will forget to arrive, but others (unexpected) will take their place.

Steel common will again command attention, but regrets and rejoicings will intermingle.

If you are long of a certain small Industrial below 20, showing pronounced strength early, **KEEP IT.**

We have decided **NOT** to make the intended **ADVANCE** in our rates **UNTIL** the above mentioned move is **COMPLETED**, as we propose to have our entire clientele aboard for this advance and **YOU** are invited. With these profits in your pocket you'll find it expensive **NOT** to renew on the regular $200 annual list

SEE MONDAY'S LETTER

A frank, conservative, definite letter mailed at 3:30 each day in a plain sealed envelope, with instructions where to buy and where to sell, what stocks to buy and what to leave alone. Terms $25 monthly or $200 annually, in advance. No free tips or samples. Checks may be drawn to order of " ———— Mgr " but all communications and remittances should be addressed to

"THE ———— ————" No ———— St., N. Y. CITY.

A unique Feature:—Special 'phone service free to clients during market hours.

FIG. 5.—A Notorious Tipster's Advertisement

ligent investors to form their conclusions regarding probable future conditions. But in general it may be said that speculation cannot be harnessed to comply with any man-made laws. Keen insight into conditions, a thorough familiarity with the earnings of certain properties, or the conditions of the crops, if this is the commodity in which a speculation is concerned, and a clear knowledge of the tendencies and trend, are abilities making for successful speculation, and they are individualistic, not mechanical. One might as well try to break the Bank of Monte Carlo, or any other game of chance, on a system, as to attempt to reduce speculation to a science. It cannot be done, for there are too many elements of uncertainty. Life itself consists of uncertainties.

Speculation Irrepressible

Withal, intelligent speculation is absolutely necessary to the material progress of a nation. Risks must be taken to make headway in business as well as in the purchase of securities or commodities. The country as a whole has spent all the proceeds of a harvest in anticipation of it, long before it gets to the markets, and immediately starts upon contracting liabilities, expecting to meet them out of the next harvest. When it overdoes this and is disappointed, the country pays the penalty by a business depression. We discount the future, and in this, speculation plays the largest part. It is impossible to deny this fact.

None of our railroads, nor any of our largest corporations, could have ever attained their prominence or magnitude had there not been an army of optimists confident of their growth, willing to take chances on the enhancement of the value of their securities when they

were low. Where would these properties have raised their necessary capital without these speculators?

When we consider that, as a result, many millions of persons find employment, we can see one of the great benefits arising from speculation.

Speculation in itself is vitally necessary. Its abuses are what we should strive to control. Many of them can be done away with by the spread of intelligence regarding its operations.

TEST QUESTIONS

1. Prove by examples that speculation is not confined to America alone.
2. Explain the attempt once made in Germany to stop speculation in grain. What were the results?
3. Explain some of the everyday affairs in which nearly everyone speculates at one time or another.
4. Give some illustrations of buying on a margin not connected with speculation on the exchanges.
5. How does a bucket shop operate?
6. What is meant by a "tipster" advertisement?
7. Why is speculation irrepressible?

CHAPTER XX

THE MYSTERY OF A BALANCE SHEET

Security-Holders' Rights to Statements

Corporations whose securities are largely in the hands of the public ought to furnish their shareholders a statement of their financial condition at least once a year. Accompanying this annual report there should be a statement of the earnings and disbursements during the year.

Shareholders have a right to know what the managers of their corporations are doing in a business way and how their properties are being managed by those chosen among them to officer and direct them.

Not all corporations, however, do this. Various reasons are given in explanation. Some maintain that in making their affairs known they lay their trade secrets before competitors. Others assert there is nothing to be gained by revealing their profits as long as the stockholders are receiving dividends regularly, and that such disclosures are likely to subject them to annoying inquisitions from tax gatherers. In answer to the first statement it is to be said that financial statements can be prepared so as not to reveal trade secrets. As for the second claim, no corporation ought to shirk paying its legitimate proportion of taxes.

Secrecy regarding financial operations has a bad effect upon confidence, as it rightly should have. Unless a

corporation is a strong one and has had an enviable financial reputation for years, the refusal to make its affairs known to the shareholders has the inevitable tendency to create the suspicion that not all is as well with it as the corporation would wish to have the shareholders believe.

As a matter of public policy, the National Government has made it compulsory for the railroads to make monthly reports of earnings and operating expenses to the Interstate Commerce Commission, and while these reports still lack clarity to most shareholders, they at least afford the opportunity to make intelligent comparisons. Some of the states also make it compulsory for the public service corporations to file their earnings for public inspection. But compulsion is far less satisfactory in supplying shareholders with information than voluntary statements by the corporations.

The majority of our corporations have come to recognize their obligations to their stockholders in this respect and at regular intervals issue earnings statements and a report at least once a year. The great United States Steel Corporation even goes so far in recognizing the rights of its more than 200,000 stockholders as to publish at least once a month the tonnage in steel orders booked.

As far as the earnings and operating expenses are concerned, there can be little about them to confuse the intelligent stockholder. There can be no juggling with these figures without the fact becoming apparent very soon.

The Balance Sheet

Where the lay mind unfamiliar with the intricacies of bookkeeping is likely to be puzzled, is in the corporation's balance sheet, which is supposed to give to the stockhold-

ers an accounting of its assets and liabilities. It is here that a good deal of educational work is necessary. The appraised value of a corporation's assets must be largely accepted upon faith. A large number of corporations, however, in an effort to convince shareholders of the authenticity of the appraisement of their financial condition, go so far as to secure an independent audit by certified accountants, a method which has been very well received and can usually be relied upon.

But an independent audit is not always what it should be. I have often seen certified statements of this character which would no more convince me that the balance sheet submitted was conservative than had the corporations submitted the figures unvouched for. Some of these accountants simply certify that they have checked the various items on a corporation's books and have found them as represented. This, bluntly stated, merely means that they have accepted them as being correct without carefully going into the matter to determine whether there has been any inflation in appraising the assets with the purpose in view of establishing a strong financial showing. This practice is based upon an erroneous conception of the functions of an auditor. He should be par excellence a critic, not a mere verifier of the books. It is his duty to elucidate the facts by showing errors of omission, of commission, and of principle. Independent audits are valuable only when made by auditors of ability and reputation.

To show to what an extent a financial statement can be made to falsify, I publish herewith a statement issued a few years ago by a wireless telegraph concern which had been engaged in the fraudulent exploitation of its shares until the Government stepped in and put a stop to the swindle. This is the statement:

ASSETS

Patents and patent rights	$ 5,005,100.00
Stock in treasury (par)	5,310,410.00
Stocks and bonds in other companies—book value	14,128,610.00
Cash in treasury and treasury agents	109,400.70
Office furniture and fixtures	3,975.38
Factory material on hand	9,285.55
Factories and equipments	25,996.94
Bills and accounts receivable	176,498.08
Land stations and real estate	215,442.50
Boat stations	287,500.00
	$25,272,219.15

LIABILITIES

Capital stock (authorized issue)	$20,000,000.00
Bills and accounts payable (current monthly)	15,556.37
Surplus	5,256,662.78
	$25,272,219.15

Here is a statement which superficially presents a very strong financial position. Taken on its face, it shows a book value for the shares, which are of a par value of $10, of over $12.50, not including its speculative possibilities. On this flimsy financial statement the financial sharks who were operating this scheme succeeded in selling considerable stock for as much as $30 a share, or three times its par value. The par value is the value of the shares as printed on the face of the certificate of stock. The very fact that so many people accepted this financial statement as representing the actual financial condition of the corporation, is sufficient proof in itself that very few investors look behind figures, although a great many things may be concealed there.

To an analytical mind the first glance at this statement would arouse at once a justifiable suspicion that there was a great deal of inflation contained in the security. Investigation would have revealed the fact that an abnor-

mal valuation was placed on "patents and patent rights." Going further, the item of stocks and bonds in other companies was apparent on the face of it to be grossly exaggerated. If nothing else would suggest this conclusion, the statement "book value" would have done so, since a well-managed corporation whose affairs are conservatively conducted does not value securities owned in other corporations at their book value, but at their market or liquidable value.

In this instance it happened that these stocks and bonds were all in defunct concerns taken over by this concern and had little, if any, value. As for the "land stations and real estate" and "boat stations," they also were arbitrarily appraised.

The result is that instead of there being a surplus of $5,256,662.78 as indicated, there was a deficit after the inflation in "patents" of $5,005,100.00, in "stock in the treasury" of $5,310,410.00, and in "stocks and bonds in other companies" of $14,128,610.00 had been deducted from the assets. Together these three items aggregated $24,444,120.00. Deducting them from the assets left only $840,099, if what can be considered the actual physical value of the remaining items is accepted as represented. When this is placed side by side with the liabilities, there is a deficit of $19,184,457, instead of a surplus of $5,256,-662.78, a hopeless case of insolvency as the shareholders' stock is practically worthless.

This illustration will serve to enlighten the readers of this book with respect to the possibilities that lie in juggling figures in making up a financial statement where the work is in charge of unscrupulous people.

Such items in a financial statement as "good-will," "patent rights," and "trade-marks" should never be included among the assets. In the first place, they are

not tangible assets. There is no way by which a market value may be placed upon them. I do not assert that they have no worth at all, for in some instances they are quite valuable, but what that value is can be determined only when an offer is made for them.

The mere assumption on the part of the directors that they would not sell these assets except at the figures at which they have valued them in their statement, by no means makes them worth that amount. They may never receive such an offer.

Such items should be carried as concealed assets. To use them for the purpose of striking a balance in a corporation's financial statement must arouse at once the belief in the intelligent investor's mind that their function is to perform the work of inflation, to make a better showing than is justified. What is more, under the cover of such assets, insolvency can be concealed, as the value of these assets may be correspondingly increased as the liabilities grow.

Creditors of a corporation, however, are very seldom deceived by these assets. They do not pay the bills. When the creditors cannot get their money promptly, it is not long before the corporation is thrown into bankruptcy. When this occurs the unsuspecting shareholders who have been going along unsuspiciously in the belief that their corporation was in a strong financial shape, are rudely awakened to the existence of a contrary state of affairs.

A financial wit once described the surplus item in a financial statement as a corporation's ash heap on which were thrown all the undesirable items which it was advisable to keep from too prying eyes. The description, however, is far-fetched. With reputable corporations the surplus stands for exactly what it means, the excess in

assets over the liabilities. It is the reverse with corporations of the other type.

For a financial schemer concerned only in defrauding credulous investors, juggling figures so as to get at a healthy surplus is the least difficult part of the work. In the financial statements which dishonest promoters concoct for their ventures, they always manipulate the figures. Their main concern is in getting people to believe in their figures.

I am reminded of a case which occurred some years ago where a Get-Rich-Quick Wallingford succeeded in deceiving even some very shrewd bankers by including for a large amount among his assets the item "Government and other bonds," thereby establishing for his venture a robust surplus upon which he was able to secure quite a number of loans. This item included one government bond of the denomination of $1,000. The other bonds were not worth the paper on which they were printed.

That a surplus is at times meaningless was demonstrated some years ago by the failure of the Baltimore & Ohio, which had been allowed by the younger generation of the founders of the property to run down. Up to the day of the failure the annual statement carried a surplus in excess of $36,000,000. But there was no surplus. The alleged surplus proved to be an item against which the railroad charged supposed equities and expenditures which were regarded as investments. The management was deceiving itself quite as much as it did the stockholders.

A Model Balance Sheet

What I should regard as an illuminating financial statement conservatively prepared is the following, recently

submitted to its shareholders by one of the smaller electrical manufacturing companies:

ASSETS

PLANT				
Lands, buildings, tools, patterns, equipment, etc., (less Reserve for Depreciation deducted $547,903.99)				$1,348,366.70
PATENTS				
Patents at cost (less depreciation deducted, $104,832.37)				25,000.00
STOCKS AND BONDS				24,021.42
MERCHANDISE				
At factory—at shop cost		$665,230.24		
Consignment—at shop cost		64,800.20		
			$730,030.44	
CURRENT ASSETS				
Accounts receivable	$766,407.80			
Less reserve for doubtful accounts	10,000.00			
		$756,407.80		
Bills receivable		31,539.14		
Cash		136,969.41		
			924,916.35	
Total merchandise and current assets				1,654,946.79
Total				$3,052,334.91

CAPITAL AND LIABILITIES

CAPITAL STOCK				$1,958,375.00
CURRENT LIABILITIES				
Accounts payable			$ 22,398.57	
Notes payable			657,500.00	
				679,898.57
SURPLUS				
Balance January 1, 1910			284,719.75	
Net profit from operation for the year 1910		$278,144.11		
Less interest paid	$ 44,300.02			
Less dividends paid	104,502.50	148,802.52	129,341.59	
Balance for December 31, 1910				414,061.34
Total				$3,052,334.91

This financial statement is as complete in essential information for the shareholders as the other and previous statement is lacking in it. In this statement the cost of patents is placed at a nominal sum, so small in fact as to show that their value about represents the actual outlay to secure the patents. The other item, "stocks and bonds," is also so small as to be insignificant. What makes the statement strong and carries the impression that the corporation has taken its stockholders wholly into its confidence, is the care taken to show everything as it actually is.

Stockholders' Duty

In England the shareholders take a greater interest in the affairs of their corporations. They do not do as many American shareholders do—leave it mostly to the officers and directors to represent them at their annual meetings through proxies. They come to the meetings in numbers prepared to heckle the chairman thoroughly regarding items in the annual statement about which they have just cause for criticism.

If more heckling were done by the stockholders in this country at their annual meetings, more care would be exercised by the directors of our corporations to have their annual statements comprehensive. There would be less mysticism in connection with the various items. We have the habit of leaving such matters, vital as they are, to others. Each item in a financial statement should be carefully scrutinized, and when there is any doubt in the mind a courteous request to the secretary for more detailed facts should bring the desired information. Any effort at concealment is a ground for suspicion unless a satisfactory explanation is offered.

In late years in the capitalization of industrial corpo-

rations, the tendency has been to depart from our more conservative methods of basing the capital on physical assets, with a reasonable margin for future growth. Instead, the earning possibilities of a corporation are capitalized. If a corporation has shown that it can earn $100,000 a year, the capital is placed at $1,000,000, and so on, irrespective of the actual assets. Fundamentally this idea is wrong. It is at the bottom of our evil of stock-watering. It robs securities of book value and places them upon the intangible basis of earning power.

That this is true can be easily shown by substituting a partnership arrangement for the issuing of stock. One would hardly pay $100,000 for a half-interest in a partnership because of the fact that the business was making $20,000 a year, which divided between two partners would reduce the revenue for each to $10,000, or 10 per cent. There are too many contingencies likely to arise that would reduce the revenue to a much smaller sum. Yet it is on this very idea that some of our captains of industry base their capital for their ventures.

TEST QUESTIONS

1. Why is it desirable that corporations should make public statements of their operations?
2. Why is there greater publicity among railroad and public utility concerns than among industrial corporations?
3. What is the policy of the United States Steel Corporation in this regard?
4. What precaution should be observed in regard to balance sheets certified to by public accountants?
5. What are some of the most common means used to inflate the assets on a balance sheet?

6. What are the strong points in the model balance sheet submitted in this chapter?

7. What are the duties of stockholders in regard to securing safe management of corporate affairs?

8. What objections from the standpoint of the investor are there to capitalization on the basis of earning power?

9. What disadvantages are there to placing a large sum of money into a partnership?

10. What measures would you propose to secure greater responsibility in the issuance of balance sheets?

CHAPTER XXI

THE NATURE OF EXCHANGES

Origin of the New York Stock Exchange

More than a hundred years ago a small group of men sat in a building located in what is now the heart of New York's financial district and organized an exchange. Their object was the common one of meeting daily to deal in the few securities for which at the time there was a market.

New York, then, although even thus early the financial capital of the struggling young country, was still a small city, not much larger in population than Albany today. But it already had a number of thriving banks and small industries in which its wealthy citizens were financially interested, and they needed a convenient place where these stocks could be bought and sold.

The founders of the exchange, which still exists as the New York Stock Exchange, desired their organization to be an exclusive one. Therefore instead of publicly incorporating their association under the laws of the state, they formed a club whose object was to bring the members together for commercial, instead of social, intercourse.

As it was a club, the members could of course arbitrarily control its policy. They could decide without any outside interference who might join their organization. This rule still prevails. While the members are free to

sell their memberships, the stock exchange, or club, as it really is, retains complete jurisdiction over the membership. The exchange can accept or reject the application for membership of any purchaser of a seat.

A seat on the stock exchange is the regular term for a membership. It is a figurative expression, as there are no chairs on the floor of the exchange. There is too much activity to permit trading in securities in such a leisurely fashion. The term, however, has been handed down from the early days of the stock exchange when the business transacted was of limited volume. There were then chairs in the little room in which the members gathered, in which they could lounge while the secretary read the offers and bids the members of the organization made and in which they governed their dealings among themselves. Such calls were made but once a day.

The idea of a stock exchange is not original with us, nor are the functions of our exchanges vastly different from those of the exchanges in other countries. Primarily they sprang into existence in response to the urgent demand for central clearing-houses for securities or commodities in which the public was vitally interested. Our New York Stock Exchange is closely patterned after the London Stock Exchange. Our grain and cotton exchanges have for their models the leading exchanges on the other side dealing in similar commodities.

Politically the center of a nation's power is at its capital. Commercially it is at the money center of the country, and it is here that the most powerful and influential exchanges will be found. In the United States New York City is the money capital of the country; in Canada, Montreal; in England, London; in Germany, Berlin; in France, Paris; in Austria, Vienna; and in Holland, Amsterdam.

FIG. 6.—The New York Stock Exchange

Membership in Exchanges

A seat on the New York Stock Exchange has sold close to $100,000. It has been some years since the value of a seat has been as low as $35,000. This gives some idea of its importance. It shows that a membership is an exceedingly valuable privilege, and as the country grows older and wealthier it is likely to increase in value.

The popular impression is that what makes the seats on the exchange so valuable is the limited membership. This is more or less a fallacy. There are other exchanges in New York City, a smaller stock exchange and a produce exchange; the membership of each of these exchanges also is limited. Yet the privilege of entree to their floors can be had for a nominal sum—a bagatelle compared to the price of a stock exchange seat. The vast amount of business transacted every year on the stock exchange alone is responsible for the high price the seats bring.

Membership in the London Stock Exchange costs more than a seat on our exchange, for the London Exchange does a much larger business even than ours. In France, where the Government controls the bourse and limits the membership to a select few, the privilege is exceedingly valuable, a recent estimate making a membership worth as high as one million dollars.

Volume of Business Transacted

Still it is not to be wondered at that men are to be found willing to pay such large sums of money to exercise these privileges. Often in single active sessions on our stock exchange as many as 2,000,000 shares of stock are dealt in and there have been sessions when the totals have reached as high as 3,000,000 shares, and this does not include at all the transactions in bonds, which also reach large proportions.

What this means in dollars and cents may best be illustrated by a short example in figures. The unit of trading on the stock exchange is $100, so that, if a stock has a par value of only $50 a share, 100 shares reported in the transaction really stands for 200 shares of stock. Examples are such stocks as Reading, Lehigh Valley, Pennsylvania, and Westinghouse Electric. Although traded in on the basis of a $100 par value, these stocks are issued only at $50 par value and are called on the stock exchange half-shares. If a person were to purchase 100 shares of any one of these stocks on the stock exchange unit, he would really be buying 200 shares. Recently the stock exchange has ruled to trade in all shares of stock on a dollar basis, doing away with the 100 share unit of trading.

Now, were we to strike an average of $50 as the price realized for all stocks sold on the stock exchange in a single active session, the total business would represent a turn-over in wealth of $150,000,000 for 3,000,000 shares; $100,000,000 for 2,000,000 shares and $50,000,000 for 1,000,000 shares. The average I have taken is a reasonable one, for there are many securities listed on the New York Stock Exchange commanding prices considerably above their par value of $100 and a small number under $50 a share.

It is the aggregate wealth which the stock exchange is instrumental in swinging back and forth which causes astonishment and reflects the great power of the exchange. The average daily transaction in a year on the New York Stock Exchange is approximately 500,000 shares. These represent the enormous total value of $15,000,000,000 a year. The value of the bonds exchanged amounts to more than $800,000,000. These figures, of course, vary somewhat from year to year.

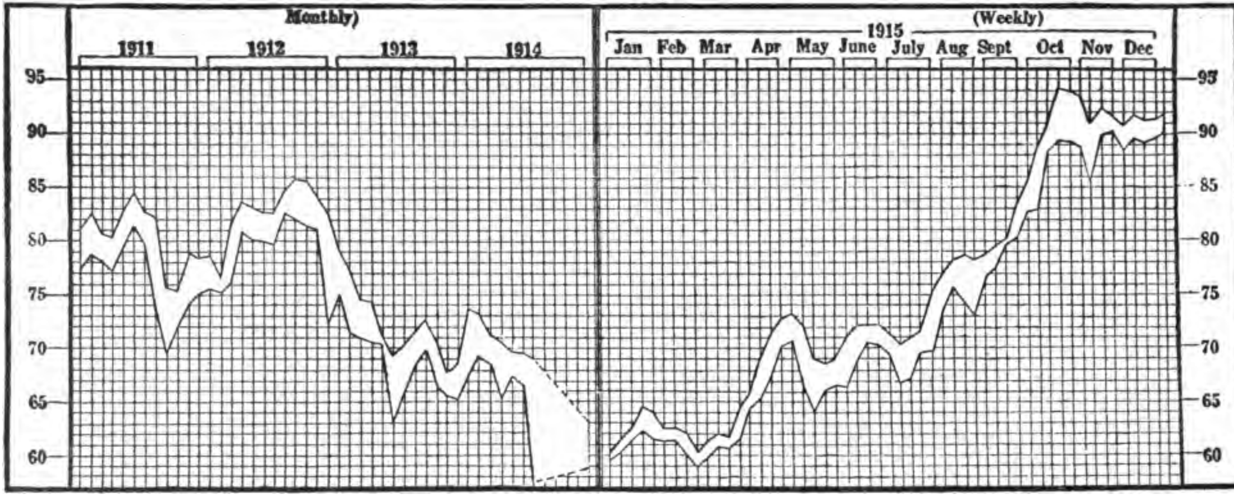


FIG. 7.—Course of the New York Stock Market

Chart showing weekly high and low average price in 1915 of fifty stocks—twenty-five railroads and twenty-five industrials—and monthly average in the four preceding years. From *The Annalist*

It is true that a great many of the active securities change ownership many times during an active season. Mr. Sereno S. Pratt, Secretary of the New York Chamber of Commerce, has shown that enough Chicago, Milwaukee & St. Paul Railroad stock has been sold in a single year to equal twenty-three and three-fourth times the total outstanding issue of the company. His investigations showed surprisingly large turn-overs in the shares of other companies. These figures enter into the enormous total of securities which are exchanged in a single year upon the exchange.

It is a fact that a great bulk of the securities are bought and sold by speculators with no intention to hold them for more than a short time and to dispose of them as soon as there is a profit, or when the holders are compelled to let go on account of exhausted margins. But this can in no way overshadow the real function of the exchange, which is, as already stated, that of a central market. In like measure is the statement true of the cotton and grain exchanges, where, instead of shares, commodities are bought and sold.

Commissions to Brokers

By the rules of the exchange a member is not permitted to charge his client more than 1/8 per cent of the par value of the stock as his commission, nor can a member charge less except when executing an order for another member; then he is allowed to make a charge of $2 for each 100 shares. This commission to the customer comes to $12.50 on each 100 shares of stock and $1.25 on each $1,000 denomination in bonds.

I am going into these small details to emphasize and drive home a realization of the vast and gigantic business machine which the stock exchange is. If its members

handled orders for 3,000,000 shares for their clients, in one session their commissions would reach $365,000. If these orders were between members, the commissions would be $60,000; on 2,000,000 shares for clients, they would receive as commission $250,000; between members, $40,000; and on 1,000,000 shares for clients, commissions of $125,000; between members, $20,000.

With such possibilities for making money, it can be readily understood why men will eagerly pay as high as $100,000 for the privilege of belonging to the stock exchange. It is safe to say that in an active year of speculation the public pays as much as $100,000,000 in commissions to the members of the stock exchange on stocks alone and almost as much for bonds bought on its floor and not over the counter. In this estimate there is not included the brokerage the public pays to members of the grain and cotton exchanges and the minor exchanges of the country, of which there are quite a number scattered through our large cities.

Listing of Securities

The stock exchange may be likened to a great auction trading-room to which stocks and bonds may be brought by those desiring to sell them, and there can be found those who are willing to buy them at the auction sale. The exchange does not, however, permit its members to sell or buy any and all securities upon its floor. Only those which have been formally approved and admitted for trading upon the exchange are eligible for these transactions.

The stock exchange has a Committee on Stock-Listing, consisting of five members, to which all applications for listing securities on the exchange are referred. This committee makes its report to the Governing Committee

of the exchange and this finally passes upon the eligibility of the securities to the floor of the exchange.

This stock-listing committee has formulated sets of regulations by which each class of securities is to be tested before it is admitted to the privileges of the exchange. The requirements for listing industrial or manufacturing securities are as follows:

1. The opinion of an attorney that the concern has been legally organized and its securities legally issued.
2. If a holding company, a statement of the financial and physical condition of the constituent companies.
3. A full description of the real, personal, and leased property.
4. A statement and proof of the title to real estate and of all liens against it.
5. A report by responsible expert accountants showing the results of business each year for two or more consecutive years, if possible.
6. A balance sheet.
7. A statement of the powers of the Board of Directors.
8. An agreement that the company will not dispose of its stated interest in the constituent companies except on direct authorization of stockholders.
9. An agreement that the company will present at least once in each year a detailed statement of its income and expenditures of the preceding year and also a balance sheet at the end of its fiscal year.

These requirements are typical of those made for all other securities listed upon the exchange. The information required must show a reasonably satisfactory condition of the affairs of the concern. There is, however, no further supervision over the affairs of the company whose stock has once been listed, though the

publicity required in the annual statement tends to accomplish somewhat the effect of supervision.

Function of Exchanges

We little realize how absolutely essential to our material progress are our exchanges. While it may be true that we could possibly get along without them, it is nevertheless a truism that without them our commercial advancement would proceed at a snail's pace. Simmered down to its last analysis, the principal function of exchanges is to provide a central market. They serve as a place for quick transactions. They make it possible to barter in securities or commodities in seconds, whereas without their existence it could not be done in a day's time—sometimes more, for the sellers would be forced to go hunting for buyers and even when they finally got together it would still be a question between them whether the prices agreed upon were fair.

While primarily the object of an exchange is to provide convenience in trading, it exercises other functions of no less importance. Besides bringing traders together, exchanges also exert a strong tendency towards an equilibrium in prices. That is to say, by gathering about them a large community interested in certain securities for which they are the central market, they bring about free and unrestrained bidding and offering, through which is established in accordance with prevailing conditions a greater stability to values. Their price-making, as determined by the dealings between their members, furnishes the banking interests of the country a fair index of the extent to which loans may safely be made upon securities. This alone is a function of inestimable value.

Another function of exchanges is that of acting as barometers of trade. They anticipate the ebb and flow

of prosperity long before the changes make themselves felt upon the surface of business. In times of panic they act as a bulwark of strength even in face of the ruthless slaughter in prices, for we could imagine what might possibly occur in the form of demoralization if there were no place where securities could be readily sold when demands for ready capital press a community.

Viewing our exchanges, therefore, in their proper light, we must appreciate their importance. Were it not for their ability to make capital mobile, there would exist a great disparity in prices. It stands to reason that the greater the number of buyers and sellers gathered together, the better and firmer tone there will be to values because of the concentrated market.

It is not because Reading or United States Steel shares are superior securities in point of intrinsic worth that a market can be found for them at a moment's notice. It is due to the fact that they have a concentrated and active market which the stock exchange alone has made possible. People will buy these stocks and buy others equally active and listed on the exchange because they realize that they can sell them quickly and at fractional changes in the price, and banks will lend money on them with equal readiness for the same reasons. They will buy these listed securities in preference to unlisted securities because there may be no market for this latter class of securities at the time one is most wanted. Thus we see that the exchanges perform two useful purposes, that of being a price-making arbiter, a power unto itself of fixing values, and that of being a quick and facile market, rapidly regulating itself to existing conditions.

In a larger way and almost unconsciously, the exchanges accomplish what a country at all times is in need of, and that is a channel through which to raise

capital for the development of its resources. By the facilities for trading that they are in a position to offer, they quicken the speculative instincts of the people.

It would have been impossible to raise the capital for the billion-and-half United States Steel Corporation without the stock exchange and its facilities. It opened the sluice ways to the nation's wealth. It made immediately possible the marketing of its shares.

The fact is undeniable that capital can be more quickly raised for general industry and for the expansion of our railroads when the public is aware that there will be a market for the new securities. What the public wants is a market in which it can sell as well as buy, and this the exchange provides. Capital gravitates to the money centers. This is a natural law like the law of gravity which makes the apple fall to the earth. It will flow to the center where it can beget the largest return for its use. What is more natural then, than that it should congest itself about the portals of the principal exchanges and its masters avail themselves of their facilities. For capital has its masters. If they are not in the form of the "captains of industry," as we are wont to call our great underwriting bankers, they are unconscious masters in the shape of accumulated deposits in the banks. These deposits, to employ themselves profitably and still be instantly available for other purposes, find the avenue whereby this object can be accomplished through loans on securities listed on the exchange or in commodities, as in grain, cotton, or metals.

That is the underlying reason why our exchanges, like great drag nets, can draw to their doors from every direction and from what seem the most inaccessible places, the liquid capital of the nation.

Our exchanges bring in the capital from the four points

of the compass, some of it for investment, some for speculation, and some, the minor part, from foolish people who, sad to say, deliberately attempt to acquire wealth overnight by simple gambling on the fluctuations. To the shrewd and fortunate ones, the exchange returns their money with substantial profits. From the misguided and unfortunate ones, it exacts its toll. It will always be so. There is no law to prevent it. It is but one of the phases of the operation of the exchanges over which no control can be exercised, for in their function of establishing prices there is no way to prevent gambling in the fluctuations in the quotations.

It has been pointed out by reformers that this could be done by prohibiting margin-trading, by forcing the outright purchase of securities and commodities. But this is a foolish conclusion. Suppose this were attempted; what would happen? Instead of the brokers' arranging the loan, the purchaser of a security would attend to it. He could not be prevented from borrowing a certain sum of money from a bank on securities if there were in existence a law compelling him to purchase securities outright.

If margin-trading is wrong, either from a moral or from a legal standpoint, then it is equally wrong to purchase real estate subject to an incumbrance. Fundamentally the practice is not wrong. The fault lies in its abuse by people who, because of their financial circumstances, ought not to buy on margin any more than a person with a few thousand dollars should attempt to buy a piece of property he could not carry because he expects to sell it at a profit before he is called upon for more money. This is not speculation; it is gambling.

The real purpose of an exchange is to make capital mobile by gathering it together. It provides capital with the opportunities to make money. It opens channels for

investments. It is a price maker, a barometer of trade, a great heart through which comes the blood to feed the arteries of commerce. Without them the commercial progress of a country would be put back many years.

TEST QUESTIONS

1. Discuss the origin of the New York Stock Exchange.
2. What is the meaning of a seat on the exchange? How did the term originate?
3. What factors determine the location of exchanges?
4. What factors control the price of seats on an exchange?
5. Give some figures to indicate the amount of business transacted on the exchange.
6. Explain the system of charging commissions used by brokers in transacting business for their clients.
7. Upon what conditions are stocks listed on the New York Stock Exchange?
8. How do exchanges aid in making capital mobile?

CHAPTER XXII

METHODS OF TRADING IN SECURITIES

TRANSACTIONS ON THE EXCHANGE

All transactions on the New York Stock Exchange itself are for cash. There is no margin-trading. The broker must pay for his purchases in full. Members must settle all differences between them for the transactions of the previous 24 hours before or at "Hammond's Time" or 2:15 p. m. At that time all securities must be delivered. All stocks bought on the previous day must then be accepted, and all stocks sold, delivered, except that stocks or bonds purchased on Friday or Saturday are not deliverable until Monday, as Saturday is a non-delivery day. Otherwise a purchase or a sale is not good.

If a member cannot settle, he is declared insolvent, and the secretary announces his embarrassment from the rostrum of the exchange. His accounts are then closed. The exchange assumes no responsibility for the liabilities of a bankrupt member. They fall entirely upon the members who are unfortunate enough to be the creditors of the insolvent member.

Whatever value a member's seat possesses, however, reverts according to the rules of the exchange to his creditors. While failures on the exchange are unavoidable, the percentage is no larger than in other lines of business.

Exchange Clearing House

The exchange operates a clearing house, much on the same plan as the clearing house for an association of banks. This clearing house enables the members to settle their obligations to one another with the least delay.

It would prove a slow and cumbersome process were it necessary every time a member bought stock for a client to draw a check to the member from whom it was purchased, or, if stock was sold, to deliver the certificate to the buyer and in turn receive a check. Through the clearing house such details are simplified. Each member has an account which is credited with stocks bought and debited with stocks sold, and settlement made accordingly.

Methods of Trading

But the mechanism of the clearing house is not of such importance as are the methods of trading employed by the members of the exchange in relation with their clients. These methods may be broadly divided into two forms, outright purchase and trading on margin; after this they may be subdivided.

First there is the purchase of securities outright. This is the simplest form. All that is necessary in this case is to give a member of the exchange an order to buy a certain amount of stock at a given price, or at the market price. The broker has the order executed and he delivers the security, charging the usual commission of 1/8 per cent. His transaction is completed when the stock is delivered.

When stock is to be transferred to a customer's name, the certificate received by the broker is sent to the transfer office of the company and a new certificate is made

out which may take two or three days after regular delivery. Stocks cannot be transferred while the books of the company are closed for dividends or for any other reason. Stock must be paid for in full before a broker will have it transferred to the customer's name, because after the stock is deposited at the transfer office it is useless to him as security until the new certificate is indorsed by the customer. Therefore, if any unforeseen circumstances should prevent the customer from indorsing the certificate, the broker would be left without security for the amount loaned.

Market orders are much the more easily executed, as they give the broker full liberty to buy at whatever the market price may be at the time the order is given, but such orders are not always to the advantage of the customer. In an active session a stock may jump a number of points in price before the broker can fill his customer's order. Sometimes, in a declining market, a market order is filled at a lower price than a customer expected. Still, it is not usual among shrewd traders to place market orders, especially in inactive securities or those stocks in which there is very little trading, when it can be avoided.

Trading on Margin

The more complex form of trading in securities is that of trading on margins. This, as already explained in the previous section, is a method of doing business by which brokers finance the purchase or sale of securities in part for their clients. Say, for example, a customer wishes to purchase one hundred shares of Union Pacific stock. Suppose at the time this stock is selling at $150 a share. The buyer does not wish to purchase the stock outright, which would cost him $15,000, plus $12.50, the broker's commission. The customer makes a deposit, say, of

$1,500, or 10 per cent of the purchase price. Members, unless they are thoroughly satisfied with the financial responsibility of a client, will not accept a deposit of less than 10 per cent of the market price of securities, and will often demand more if the securities desired have an inactive or feverish market. Some brokers dealing in inactive stock will not buy for customers except by outright purchase, since such stocks have no ready market and the brokers do not wish to be caught with them on their hands in case their customers cannot take them up.

But since the majority of stock exchange members will buy active stocks for clients on a 10 per cent margin, the illustration will serve my purpose in explaining in detail how such orders are handled. After the customer deposits his margin and gives his order, the broker, upon executing it, arranges with his bank for a loan for the greater part of the purchase price. It is the usual custom for banks to lend on active securities up to 80 per cent of their market value, always with the proviso that the borrower must deposit additional collateral if the market price declines to where the bank's equity in the loan is impaired.

With a loan from his bank for approximately 80 per cent of the market price of a stock, with his customer having deposited 10 per cent margin, there remains for the broker, therefore, only 10 per cent, which he must provide out of his own capital. On some securities he must put up more, while others he must finance wholly out of his own capital, as the banks will make no loans on them. Here we have a succinct illustration of what is called margin-trading in its simplest form. Now, if Union Pacific stock advances to $160 a share, the customer then has a profit of $10 a share, or $1,000 on his

one hundred shares, less, of course, commission and the interest he owes on the balance due on the stock.

Call Loans

Although not stated, it is usually understood, unless agreed otherwise, that all loans on stocks are call loans, made at the prevailing rate of interest on such loans throughout the period for the bank which carries the stock.

Call loans differ from time loans in that the lender is empowered to demand at his discretion, and without previous notice from the borrower, the payment of his loan. With a time loan, a loan extending over a specified period, the lender must wait for payment until the loan matures.

Large stock exchange operators, whose business is worth having, have an advantage over small traders, since they can privately arrange through their brokers for time loans at reasonable rates of interest as a safeguard against any unusual flurry in interest rates in an excited period of speculative activity.

When there is an accumulation of capital in the vaults of the banks, interest rates on call loans are unusually low. There have been times when such loans could be made by large borrowers at interest rates as low as one per cent. But this condition may quickly change. It is often reversed at the crop-moving period, when interior banks draw on their central bank reserves to provide for the borrowing demand at home. Then it is that loanable capital becomes scarce and commands a premium. Call loans will then sometimes jump to 100 per cent or more.

During the so-called Gates boom in stocks, call loans touched as high as 200 per cent. For one half hour, in October, during the climax of the 1907 panic, call loans were not to be had at any price, although frenzied brokers,

whose tense and blanched faces saw disaster staring them in the face, were willing to accept any terms to get money to save them from the ruin that seemed inevitable. A powerful banking syndicate was hurriedly formed to lend $25,000,000 on the stock exchange. The money was obtained, and it saved the day.

In adverting to the variability of interest rates for call money it is my purpose to direct attention to the influence these changes exert on speculation. In fact, observing speculators watch call money interest rates almost as closely as they study prevailing tendencies and conditions in trade, to determine their effect upon security prices.

Take up once more the case of the imaginary buyer of one hundred shares of Union Pacific stock. If he has a profit, he can close his account and draw from his broker his margin, plus the additional amount represented by the advance in his stock, or, if he desires to extend his operation, the increase in his credit balance allows him then to do so.

On the other hand, if Union Pacific, costing $150 a share, declines in price, say in the neighborhood of $140, where the broker fears an impairment of his customer's margin to the point of exhaustion, he will call upon him for an additional margin and unless this deposit is immediately forthcoming it is within the broker's discretion to close the account, sell the stock, and settle with his customer. He does not have to wait until the stock touches $140 a share before doing this. For his own protection he is allowed this privilege, and it is so stated in the agreement the customer signs when placing an order.

The operation varies slightly when a buyer turns a seller of stock. A speculator, believing that Union Pacific at $150 a share is selling too high, will sell the stock

through the broker at this price. Suppose he agrees to sell one hundred shares. He deposits with his broker a margin of 10 per cent or $1,500. As he is selling, he does not have to borrow any money. He simply agrees to deliver one hundred shares for $150 a share when he is ready to do it. Should Union Pacific decline to $140 a share, the seller could buy one hundred shares in the open market at this price and by so doing would be making a delivery of his stock on his selling contract. As he has sold it for $150 and bought it for $140 he has made a profit of $10 a share or $1,000 on his sale of one hundred shares. The greater the decline in the price, the larger his profit. But should Union Pacific advance instead of decline in price, every point above $150, the price he agreed to deliver it for, means a loss of one dollar on each share. If the stock should advance to $160 a share, his margin would be exhausted unless he had made an additional deposit to further protect himself.

Stop-Loss Orders

Stop-loss orders are used to limit the amount of possible loss on any transaction. Stop-loss purchases or sales are always made "at market" when a certain price is reached. For instance, if Union Pacific is selling at $135 and an order is placed to sell 100 shares at $130 stop, it means that when the price of Union Pacific on the stock exchange reaches $130 the 100 shares are to be sold at the best price obtainable. If it is impossible to execute the sale exactly at the stop figure it will be executed as soon as a sale can be made under $130. Conversely, if an order is given to buy 100 shares at say $140, it means that 100 shares are to be purchased at the market when the price reaches $140 or higher.

Stop-loss orders are a valuable device for limiting the

losses of traders. Purchases may have been made at a certain figure in the belief that the market is to advance but something occurs to cause a break. If a stop-loss order is in, the loss is confined to approximately the difference between this figure and the price at which the stock was purchased, and if it should break ten points further the trader would have saved just that amount. This protection may also be used when a profit is shown on a transaction and the trader believes it will run still further. He may then place a stop-loss order below the market if he is long, or above the market if he is short, but at a figure where a profit is assured. In this way, the transaction may be allowed to run on with all risk of loss eliminated.

Methods of Quoting Prices

On the stock exchanges, the dollar mark is the sign of values and it is divisible into fractions of eighths. Each 1/8 stands for 12½ cents of the dollar. To illustrate more clearly the proposition, take as an example such a popular stock as United States Steel and suppose it is reported in the opening quotations as selling at the even mark of $70 a share. The next quotation is at 70⅛: this means the stock has been bought for $70.12½. If the quotation is 70¼, it represents $70.25; at $70⅜, it is $70.37½; at $70½, it is $70.50; at $70⅝, it is $70.62½; at $70¾, it is $70.75; at $70⅞, it is $70.87½; and then $71. Conversely, every eighth fraction less in the reported price of a stock represents a loss of exactly 12½ cents in its market value, and so on.

On the board of trade or the produce exchange the transactions in grain are on the basis of bushels. On the cotton exchange cotton is bought and sold in bales. On the grain exchange the dollar is the mark of value and it

is also divisible into fractions as small as 1/16. In cotton it is divided into points.

Units on Stock and Produce Exchanges

On the stock exchanges are to be found shares and bonds only. On the grain exchanges agricultural products are the staples in which the public barters, including live stock and the various farm products. The popular staples forming the bulk of the business are wheat, corn, oats, rye, and barley. From a trading standpoint the lesser staples are live stock, under which head are cattle, hogs, lard, and tallow. Live stock is sold by the pound; lard and tallow by the tier. On the cotton exchange all the dealings are confined to cotton and its principal constituent, cottonseed oil. In New York City there is an important coffee exchange and a metal exchange, but neither one has much of a public following. Important as are our dairy products, such as milk, eggs, and butter, in point of aggregate money value very little trading is done in them on the exchanges. Whatever speculation there is in them is carried on directly among the dealers who, under favorable circumstances, sometimes attempt a coalition in their interests to maintain higher prices. Towards that end the storage houses prove an important ally, as they enable the dealers to store their purchases until they can market them at profitable prices.

Value of Margin-Trading

Certain reformers have heaped a great deal of abuse upon margin-trading. They regard it as a malevolent influence upon the country. How inconsistent is the assertion can easily be demonstrated. A man of wealth, or even one in comfortable circumstances, may feel perfectly justified in the purchase of a block of stock on

margin. He may not wish to tie up the entire purchase price by paying for it outright, although if necessary he could advance the whole amount, take the securities out of the market, and put them away in his safe. Has he not the right to make such a purchase? To deny him the privilege and permit a tradesman to use his credit for the purchase of goods would be unfair and unjust.

Suppose he were cut off from the privilege of trading in this manner through a member of the stock exchange, he could not be prevented from carrying out a similar operation though more cumbersome, in another form. If he has credit at his bank he could borrow the money to buy the stock outright, and when it has been delivered to him take it over to the bank and pledge it as collateral for his loan. When the stock showed him a profit he could then sell it, pay the loan, and so close the matter. Assuredly banks could not be prevented from making loans upon good collateral. That is their business. It is one of the principal mainstays for the profitable employment of their deposits.

Between the two methods there is no difference, save that the one operation is more mobile than the other. There is nothing fundamentally wrong in margin-trading. It is not an evil. The evil lies in the abuse of the system by persons whose circumstances and knowledge do not justify their trading in this manner. Such people attempt to do the impossible on a "shoe-string." To some extent it is the fault of the brokers, but it is fair to say on behalf of the majority of the members of the stock exchange, that they do not encourage speculation among those whose financial resources are limited, or by the ignorant, while speculative accounts of women are regarded as particularly offensive by the stock exchange itself.

It is well-nigh impossible to exclude these people altogether from speculation. Gamble they will in some form or other, and find a means to satisfy their cravings. The Government put a stop to the Louisiana lottery, yet the people kept on gambling. Racing was stopped by various states, but the restrictive measures failed to check betting on the races. So it is with card-playing; it is illegal, but gambling rooms continue to thrive.

There are other abuses of the machinery of the stock exchange, as I shall try to point out later, but they can in a large measure be controlled without striking a suicidal blow at the function it performs for the country—of providing it with a great central market for the mass of its securities.

Selling stock on margin is regarded as a greater evil than even buying on margin. No one should sell what he does not own, is generally the claim made to justify this contention. How inconsistent this is can also be easily shown. All our millers sell flour long before they know what the harvest is to be. They bank on the correctness of their judgment as to the size of the crop, expecting to buy their wheat cheap enough from the farmers to make a good profit out of the difference. The contractor agrees to build a house for a certain price, relying on his judgment of the market for labor and material to net him a good profit, although in the meanwhile prices may go up above his estimate. Even the laborer sells his labor "short," and theoretically, when he finds he cannot make his living expenses square with his wages, he has lost money.

Where then is the difference between the examples just cited and selling securities? If a person believes a security is commanding too high a price, he is morally justified in selling it, even if he does not own it, as much

as the miller has the right to sell flour he expects to grind from next season's wheat harvest, or the contractor estimates on constructing a building from material he has not yet bought or labor he has not yet hired.

Nor can the lay mind fully realize what a great bulwark the selling of securities which are not owned at the time they are sold is in times of stress when everyone seems to be anxious to unload securities. In such times these "short" sales are the only mainstay of the market. What has been sold and is not owned, must be bought back sooner or later by the sellers so that they may turn their profits into cash. Were it not for these "short" sales buttressing the market, prices would not only decline perpendicularly but fall all to pieces, and the widespread fear aroused would have a most disastrous result.

TEST QUESTIONS

1. How are deliveries made for purchases on the exchange?
2. What is the purpose of the exchange clearing house?
3. What is meant by market orders?
4. Explain the process of trading on margin.
5. What is a stop-loss order?
6. Explain the method of quoting prices on the stock exchange.
7. Explain the trading units used on the exchange.
8. What are the chief objections to trading on margin, and how are they answered?

CHAPTER XXIII

STOCK-MARKET TERMS AND PHRASES

Bulls and Bears

The followers of the exchanges are divided into two camps. We know them as "bulls" and "bears." The bulls on the stock exchanges are the optimists, the men who are prepared to back their judgment of the betterment of trade and its consequent reflection in a better price for securities. The bears see the darker side of business and expect to benefit by a decline in values which may be brought about by a slackening in trade and from commercial disasters which they try to anticipate through sales of securities before the occurrence of the trouble.

On the constructive side of values are ranged the bulls; on the destructive side, the bears. Although, in public opinion, the bear's position is an unenviable one, his is a necessary role in the scientific game of speculation. As already pointed out, the bears in a critical period act as about the only mainstay against a wholesale destruction of values.

Still, it is more or less a stock-market truism that there are few chronic bears who, in the long course of events, have kept the large fortunes they were popularly supposed to have made, notwithstanding that their opportunities for quick and substantial profits, when their position is the correct one, are much greater.

Our greatest stock-market bears, those who have made stock-market history died comparatively poor men. Occasionally there passes over the stock market horizon a meteor in the shape of a successful and spectacular bear who happens to plunge on a decline in security prices at a psychological moment and is carried by the avalanche in the slaughter of values from comparative obscurity to a position of great wealth. Yet, usually his good fortune is only temporary. Somehow these striking figures seem not to realize that stock values can no more continuously decline than they can constantly go up. They overstay their market and within a short time all their wealth slips away as easily as it came to them.

A fair illustration of this, which is still remembered, is that of J. Brandt Walker, a daring Chicago speculator, who burst into fame as a big stock-market bear on the eve of the great panic of 1907. The newspapers all over the country printed columns about the many millions he was credited with making. There can be no question about his temporary success; no doubt his profits ran into millions, but it was less than a year later that he lost all his winnings, and as a prominent stock-market figure he became only a memory.

The chronic bear sooner or later invites disaster. So also does the chronic bull. The successful trader is that person who can adapt his opinions to the long trend in the course of values, whether it be downward or upward. That there takes place periodically an adjustment in business cannot be refuted, but it does not occur at regular periods, for if such were the case much of the uncertainty connected with speculation and upon which it thrives would be eliminated. Adjustments often come quite suddenly and unexpectedly. There will come a check to a boom. It usually occurs when we have

exhausted, in the rapid haste for expansion, all the available capital at our command. In the same way a check to a decline will occur when all the forced liquidation has been completed. Between the two extremes there takes place a period of stagnation, a sort of pause in our activities, a pause to afford an opportunity to form new conclusions.

Broadly speaking, everyone who deals in securities is at one time or another a bull or a bear. When a person sells a stock it is a sign that he has concluded the rise in the stock's value has reached its apex and he is willing to let someone else take the chance of a further appreciation. He may sell for other reasons. Nevertheless, whatever the cause, the seller is constructively a bear. On the other hand, the buyer is a bull. If he is buying a stock he has sold to someone previously to make his delivery, it is a sign that he has decided in his own interest that the decline in value has run its course. But in a growing country the predominance of opinion is toward the bullish side of the market. It is a natural position.

J. Pierpont Morgan gave it as his opinion some years ago that anyone who is not a bull in this country will eventually go broke. His saying has become a stock-market adage and not without good reason. Our financial history so far has clearly shown that the country has emerged from every panic and depression stronger than ever and capable of greater progress.

In the eighties, when nearly two-thirds of our railroad mileage was in charge of the courts, men who had faith in the country's future, men like Morgan, Hill, Kennedy, and Vanderbilt, were laying the foundations for their huge fortunes, whereas other men who could not see the

sunlight behind the heavy clouds of pessimism, one by one went broke.

Then, too, it is only a natural trait of human nature to be a bull. Underlying the greatest progress is the spirit of optimism. It comes natural to most of us to see the bright side of business. In fact, our wishes are fathers to this hope. Our prosperity individually and collectively has progress as its foundation. Morgan knew this, and hence the now famous axiom.

The very fact that nearly nine out of ten people are naturally bulls in their inclination is what bucket-shop operators banked on in the successful conduct of their outlawed business before the authorities decided upon a concerted plan to put a stop to them. Bucket-shops are institutions which never buy anything, but simply gamble against the judgment of their customers. A bear panic or a bear market was necessary for their success, as such moves wiped out the paper profits of their customers, most of whom were perpetually "long" on stocks, or chronic bulls. These concerns were simply gambling places whose backers bet their capital on the price fluctuations against the capital of their clients. When bucket-shops were tolerated a long protracted bull market usually saw a great mortality in their number, whilst a bear market found them sprouting like mushrooms.

In the grain, cotton, and coffee markets, the position of the bulls and bears is a reversal of that occupied in the stock market. The bull on these staples is not the advance agent of prosperity. He does not expect to see higher prices because of the greater output in the harvest. Higher prices come to him as a result of a shortage in crops. The bear is really the bull considered in the light of the benefit accruing to the public from his operations.

He works for lower prices on his expectations of a bumper harvest.

The "longs" and the "shorts" are other names to differentiate between the bulls and the bears. The "longs" buy for a rise, the "shorts" sell for a decline.

Accrued Interest and Dividends

"Ex dividend" means that on the given day when a corporation's books close for the payment of the dividend to all stockholders of record, the stock is quoted with the dividend deducted from the price. Unless this is known the lower price of a stock selling "ex dividend" is likely to confuse the uninitiated. When Union Pacific declares a quarterly dividend of 2 per cent and the price of the shares was $175 the day previous, Union Pacific will sell "ex dividend," or at $173, meaning that $2.00, the equivalent of the dividend on each share, has been deducted. It is the same when a corporation declares a stock dividend in addition to a cash dividend. Sears Roebuck & Co., in 1911, gave the stockholders a stock dividend amounting to about the equivalent of $12 a share. The day after the stock dividend was payable the stock sold, stock and cash "ex dividend," or about $14 less than on the previous days.

In buying bonds on the stock exchange, or for that matter over the counter of a bond house, it is understood that accrued interest is added to the price, although this is not mentioned. For example, a bond bought in May whose interest is due in July, carries five months' interest which is represented in the coupon attached to the bond. This interest for the period between January and May, properly belongs to the holder of the bond from whom it is purchased and must be paid to him in addition to the purchase price. The term "flat" is often

used to designate bonds in which the accrued interest is included in the price of the bond. In private transactions, many bonds are sold on a flat basis instead of the accrued interest basis.

Investment Return

The actual percentage return to an investor is not the interest or dividend rate of his securities, but the yield divided by. the price. Figure 8 gives a handy table for figuring instantly the actual return at a given price of securities with different interest or dividend rates.

Rights

"Rights," a term frequently seen, denotes the market value of the privilege accorded to stockholders of record in a corporation to purchase additional shares it has authorized. In value these rights vary in accordance with the market premium the stock may command.

Of course, if a stock is selling for less than its par value, there is no value to the rights to subscribe for new stock. But with some corporations such rights are extremely profitable. It has been estimated for some years back that besides their cash dividend the stockholders in such a prosperous corporation as the Chicago & North Western have received rights to more stock which brought their average return upon their investment nearer to 25 per cent than 7 per cent, provided that they availed themselves of their privilege to sell their "rights."

A corporation with a $100,000,000 capital may elect, upon the favorable vote of the majority stockholders, to increase its capital by $10,000,000. Each shareholder would then have the privilege to take ten new shares for each ratio of one hundred shares owned. If the stock

Income Yield of Securities Paying

Price %	3%	4%	5%	6%	7%	8%	9%	10%
50	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00
51	5.88	7.84	9.80	11.76	13.73	15.69	17.64	19.61
52	5.77	7.69	9.62	11.54	13.46	15.38	17.30	19.23
53	5.66	7.55	9.43	11.32	13.21	15.09	16.98	18.87
54	5.56	7.41	9.26	11.11	12.96	14.82	16.67	18.52
55	5.45	7.27	9.09	10.91	12.73	14.55	16.36	18.18
56	5.36	7.14	8.93	10.71	12.50	14.29	16.07	17.86
57	5.26	7.02	8.77	10.53	12.28	14.04	15.79	17.54
58	5.17	6.90	8.62	10.34	12.07	13.79	15.52	17.24
59	5.08	6.78	8.47	10.17	11.86	13.56	15.25	16.95
60	5.00	6.67	8.34	10.00	11.67	13.34	15.00	16.66
61	4.92	6.56	8.20	9.84	11.48	13.11	14.75	16.39
62	4.84	6.45	8.06	9.68	11.29	12.90	14.51	16.13
63	4.76	6.35	7.94	9.52	11.11	12.70	14.29	15.89
64	4.69	6.25	7.81	9.38	10.94	12.50	14.06	15.62
65	4.62	6.15	7.69	9.23	10.77	12.31	13.85	15.38
66	4.55	6.06	7.58	9.09	10.61	12.12	13.64	15.15
67	4.48	5.97	7.46	8.96	10.45	11.94	13.43	14.93
68	4.41	5.88	7.35	8.81	10.29	11.76	13.24	14.71
69	4.35	5.80	7.25	8.70	10.14	11.59	13.04	14.49
70	4.29	5.71	7.14	8.57	10.00	11.43	12.86	14.28
71	4.23	5.63	7.04	8.45	9.86	11.27	12.68	14.08
72	4.17	5.56	6.94	8.33	9.72	11.11	12.50	13.80
73	4.11	5.48	6.85	8.22	9.59	10.96	12.34	13.69
74	4.05	5.41	6.76	8.11	9.46	10.81	12.16	13.51
75	4.00	5.33	6.67	8.00	9.33	10.67	12.00	13.35
76	3.95	5.26	6.58	7.89	9.21	10.53	11.84	13.15
77	3.89	5.19	6.49	7.79	9.09	10.39	11.69	12.98
78	3.85	5.13	6.41	7.69	8.97	10.26	11.54	12.82
79	3.80	5.06	6.33	7.59	8.86	10.13	11.39	12.65
80	3.75	5.00	6.25	7.50	8.75	10.00	11.25	12.50
81	3.71	4.94	6.17	7.41	8.64	9.88	11.11	12.34
82	3.66	4.88	6.10	7.32	8.54	9.76	10.98	12.19
83	3.62	4.82	6.02	7.23	8.43	9.64	10.84	12.05
84	3.57	4.76	5.95	7.14	8.33	9.52	10.71	11.90
85	3.53	4.71	5.88	7.06	8.24	9.41	10.59	11.76
86	3.49	4.65	5.81	6.98	8.14	9.30	10.47	11.62
87	3.45	4.60	5.75	6.90	8.05	9.20	10.34	11.49
88	3.41	4.55	5.68	6.82	7.95	9.09	10.23	11.36
89	3.37	4.49	5.62	6.74	7.87	8.99	10.11	11.23
90	3.33	4.44	5.56	6.67	7.78	8.89	10.00	11.11
91	3.30	4.40	5.49	6.59	7.69	8.79	9.89	10.98
92	3.26	4.35	5.43	6.52	7.61	8.70	9.78	10.86
93	3.23	4.30	5.38	6.45	7.53	8.60	9.68	10.75
94	3.19	4.26	5.32	6.38	7.45	8.51	9.57	10.63
95	3.16	4.21	5.26	6.32	7.37	8.42	9.47	10.52
96	3.13	4.17	5.21	6.25	7.29	8.33	9.37	10.41
97	3.10	4.12	5.15	6.19	7.22	8.25	9.28	10.30
98	3.06	4.08	5.10	6.12	7.14	8.16	9.19	10.20

FIG. 8.—Table Showing Income Yield of Securities

Income Yield of Securities Paying

Price %	3%	4%	5%	6%	7%	8%	9%	10%
99	3.03	4.04	5.05	6.06	7.07	8.08	9.10	10.10
100	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00
101	2.97	3.96	4.95	5.94	6.93	7.92	8.91	9.90
102	2.94	3.92	4.90	5.88	6.86	7.84	8.82	9.80
103	2.92	3.88	4.85	5.83	6.80	7.77	8.74	9.70
104	2.88	3.85	4.81	5.77	6.73	7.69	8.65	9.61
105	2.86	3.81	4.76	5.71	6.67	7.62	8.57	9.52
106	2.83	3.77	4.72	5.66	6.60	7.55	8.49	9.43
107	2.81	3.74	4.67	5.61	6.54	7.48	8.41	9.34
108	2.78	3.70	4.63	5.56	6.48	7.41	8.33	9.25
109	2.75	3.67	4.60	5.50	6.42	7.34	8.25	9.17
110	2.73	3.64	4.55	5.45	6.36	7.27	8.18	9.09
111	2.70	3.60	4.50	5.40	6.31	7.21	8.11	9.01
112	2.68	3.57	4.46	5.36	6.25	7.14	8.04	8.93
113	2.66	3.54	4.42	5.31	6.19	7.08	7.96	8.85
114	2.63	3.51	4.39	5.26	6.14	7.02	7.90	8.77
115	2.61	3.48	4.35	5.22	6.09	6.96	7.83	8.69
116	2.59	3.45	4.31	5.17	6.04	6.90	7.76	8.62
117	2.57	3.42	4.27	5.13	5.98	6.84	7.69	8.55
118	2.54	3.39	4.23	5.08	5.93	6.78	7.63	8.47
119	2.52	3.36	4.20	5.04	5.88	6.72	7.56	8.40
120	2.50	3.33	4.17	5.00	5.83	6.67	7.50	8.33
125	2.40	3.20	4.00	4.80	5.60	6.40	7.20	8.00
130	2.32	3.08	3.85	4.62	5.38	6.15	6.92	7.69
135	2.22	2.96	3.71	4.44	5.19	5.93	6.67	7.41
140	2.15	2.86	3.57	4.29	5.00	5.71	6.43	7.14
145	2.07	2.76	3.45	4.14	4.83	5.52	6.21	6.90
150	2.00	2.67	3.33	4.00	4.67	5.33	6.00	6.67
155	1.94	2.58	3.23	3.87	4.52	5.16	5.80	6.45
160	1.88	2.50	3.13	3.75	4.38	5.00	5.63	6.25
165	1.82	2.42	3.03	3.64	4.24	4.85	5.46	6.06
170	1.77	2.35	2.94	3.53	4.12	4.71	5.29	5.88
175	1.72	2.29	2.86	3.43	4.00	4.57	5.14	5.71
180	1.67	2.22	2.78	3.33	3.89	4.44	5.00	5.56
185	1.62	2.16	2.70	3.24	3.78	4.32	4.86	5.41
190	1.58	2.11	2.63	3.16	3.68	4.21	4.73	5.26
195	1.54	2.05	2.56	3.08	3.59	4.10	4.61	5.13
200	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00
210	1.43	1.90	2.38	2.86	3.33	3.81	4.28	4.76
220	1.37	1.82	2.27	2.73	3.18	3.64	4.08	4.55
230	1.31	1.74	2.17	2.61	3.04	3.48	3.91	4.35
240	1.25	1.67	2.08	2.50	2.92	3.33	3.75	4.17
250	1.20	1.60	2.00	2.40	2.80	3.20	3.60	4.00
260	1.16	1.54	1.92	2.31	2.69	3.08	3.46	3.85
270	1.11	1.48	1.85	2.22	2.59	2.96	3.33	3.70
280	1.07	1.43	1.79	2.14	2.50	2.86	3.21	3.57
290	1.04	1.38	1.72	2.07	2.41	2.76	3.10	3.45
300	1.00	1.33	1.67	2.00	2.33	2.67	3.00	3.33
400	.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50

FIG. 8.—Continued

sells for $125, the market value for one hundred shares would be $12,500, and for ten shares $1,250. Therefore, if a corporation offers its shareholders the privilege to take the newly authorized stock at par, the rights would be worth $250 on each block of ten shares or $25 on each share.

In stock-market parlance, these rights are also called a "melon-cutting." These "melons" may consist of new stock or the distribution of a large extra dividend, in form of cash or stock. Such prospects frequently lead to a considerable outburst of speculation in the shares which are expected to receive liberal treatment.

Odd Lot

While the bulk of the business on the stock exchange is transacted in the unit of one hundred shares or multiple thereof, there is also considerable business done in smaller units and to designate this trading the term "odd lot" or fractional orders has been coined among brokers, meaning the purchase or sale of shares in less number than one hundred shares.

Irish Dividend

"Irish dividend" is a term of sardonic derision. It stands for an assessment levied by an embarrassed corporation on its stockholders in an effort to reorganize and place itself once more among solvent corporations.

Puts and Calls

A "put" is a contract which gives the holder the right to deliver to the maker of the contract a number of shares of stock at a specified price within a limited time. On the other hand a "call" gives the holder the right to

demand from the maker of the contract a certain number of shares at a specified price within a limited time.

Speculators often make such contracts with others as a precautionary measure to limit their losses. The buyers of these "put" and "call" contracts pay a certain price for this privilege to demand or deliver stock within the time limited by the contract.

A, for example, will buy one hundred shares of American Car & Foundry stock for $60 a share. He may not wish to take more than a loss of $5 on each share, so he sells a "put" to B on one hundred shares, good for thirty days for $150. Should the stock decline below 55 within these thirty days, each point decline represents a profit to B of $100 on the one hundred shares. If the stock goes to $50 a share then B, the holder of the "put," can go into the market, buy the one hundred shares at a cost of $5,000 and deliver them to A, the maker of the contract, for $5,500. His profit then will be $500, the difference less the cost of the "put," $150, and the broker's commission, $12.50, or $337.50. Should the stock not decline during the term of his contract, he is out only his $150.

The operation is similar in a "call" contract. A, in this instance, sells one hundred shares of Car & Foundry stock at $60 in anticipation of a decline, but wishes to limit his loss to $5, that is, he wants to protect himself against any further advance than $65 a share. So he sells to B a "call" contract that gives B the privilege of calling upon him for one hundred shares at any price above $65 a share within the specified thirty days. Every point advance above $65 represents then a profit of $100 to B, less the cost of his call and broker's commission.

The cost of such privileges varies in accordance with the duration for which they are given: the shorter the

time, the cheaper the price; and the longer the time, the dearer the price. The only risk involved to the purchasers of these privileges is their cost. They are out this money if the opportunity to exercise their privilege at a profit fails to offer itself within the specified time. General conditions and the technical position of the stock market usually determine the market value of "put" and "call" contracts.

Spread and Straddle

A "spread" is a privilege to combine a "put" and a "call" contract. The holder of a "spread" has paid for a privilege for a certain time either to deliver a stock at a stipulated price to the maker of the contract, or to call upon him for the stock. In buying a "spread" contract the purchaser expects to profit through a large advance as well as a decline. In either case, should the stock pass his contract price, he could execute his "spread" and take his profit, figured on the same basis as illustrated in the "put" contract. Should the stock both advance and decline within the contract period to a favorable point of execution, the holder of a "spread" would doubly profit, but should it touch neither figure, then he is out the money the "spread" has cost him.

A "straddle" is not unlike a "spread" contract, except that it is made at the market and the execution of either one of its privileges nullifies the other. The "straddle," however, is the most expensive of the privileges mentioned.

These contracts are favorites with small speculators who are willing to assume the risk the privilege costs for either a "call" or a "put" on a stock, in the expectation that the chance will occur during the life of their contract to execute it at a profit. However, such privi-

leges ought to have the endorsement of a member of the stock exchange. They are good only if the maker of the contract is himself solvent.

Wash Sales

Wash Sales constitute one class of fictitious transactions which take place on exchanges. In wash sales two or more members get together to buy or sell stocks between themselves to establish quotations so that they may be reported in the official transactions of the stock exchange. These fictitious sales are forbidden by the rules of all regular exchanges and are not enforceable at law. Brokers who engage in such sales run the risk of detection and expulsion, which is to them a sentence of financial death.

Match Orders

Match orders differ from wash sales in that they are actual and enforceable contracts. One broker will have an order to buy one hundred shares or more at a certain price and another broker an order to sell a similar amount of stock at the same price, both orders emanating from the same source. These brokers without knowing that other brokers have countervailing orders from the same principal, execute their orders upon the floor of the exchange in the regular order. Such transactions cause an appearance of activity and a certain security which is unreal. The public unaware that these orders are artificial, accepts them as actual transactions.

Pyramiding

This denotes the operations by the use of paper profits made in transactions not yet closed and therefore not yet in hand. For instance, one may purchase one hundred

shares of stock at 50 on a margin of 10 per cent of the paper value. If the stock advances to 60, the purchaser will then have 20 per cent margin, and he will purchase one hundred shares more. If the price then goes to 70, he will purchase 200 shares more, giving him 400 shares in all. If it next goes to 80, he will then purchase 400 shares more, giving him 800 shares in all, on which he has a margin of 10 per cent or $8,000. Up to this point his paper profits will be $7,000. If the market continues in its rise, he will continue accumulating stock until his account shows very large accumulated paper profits. If he then sells out, he will have turned his profits into cash, but if the market suddenly drops 10 points, he will not only have lost the profits on the last transaction, but will have lost everything. In other words, the inverted pyramid will have fallen and ruined him in the crash.

The use of paper profits in stock transactions as a margin for further commitments should be discouraged. The practice tends to produce more extreme fluctuations and more rapid wiping out of margins. If the stock brokers and banks would make it a rule to value securities for the purpose of margin or collateral not at the current price of the moment but at the average price of some months passed (provided that such average price were not higher than the price of the moment), the dangers of pyramiding would be largely prevented and the practice discouraged.

Arbitrage

The buying and selling of the same security in different markets, as New York and London or New York and Chicago, for the purpose of making a profit from the difference in quotation between the two markets, is known as arbitrage. This trading is, of course, based

on temporary differences in prices between markets, due to some special cause, as against most other forms of speculation in which the risk is based chiefly on the time element. Transactions may be carried on profitably even on the variation of a slight fraction, but the business requires most scientific skill and rapidity of thought.

The difference in time between London and New York, as well as local tendencies which have a remote bearing upon another market, tighter money, etc., account for the difference in prices. As between New York and London the business requires very quick conversion of London prices to American equivalents by means of tables prepared for this purpose. The expenses of communication for the transaction of the business, as well as of shipping the securities and securing insurance upon them, are expenses to be considered in determining whether the difference in price is sufficient to induce the broker to buy or sell.

TEST QUESTIONS

1. What is the distinction between a bull and a bear?
2. Distinguish between the longs and the shorts of the market. Illustrate.
3. What is meant by "ex dividend"?
4. What is the meaning of rights?
5. What is an Irish dividend?
6. Explain exactly what is meant by a call. A put.
7. What is meant by a spread? A straddle?
8. Explain what is meant by pyramiding.
9. What are wash orders?
10. What is the meaning of arbitrage?

CHAPTER XXIV

OPERATIONS ON OTHER EXCHANGES

Produce Exchanges

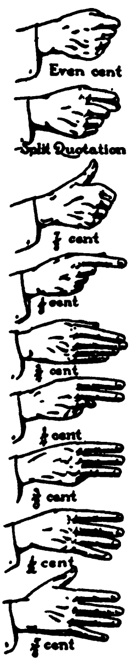
We have already noted that exchanges are associations of traders, leagued together for mutual protection by rules of their own making. They organize their own market and have jurisdiction over the membership, commodities dealt in, inspection, contracts, finances, etc., of their exchanges.

This same principle has been applied to the marketing of raw materials such as wheat, cotton, tobacco, and live stock. Such exchanges are known as produce exchanges, and are of two kinds, general and special. A general exchange deals in a variety of commodities, such as grain, flour, and dairy products. The Board of Trade of Chicago is a good illustration of a general exchange. A special exchange deals only in one article such as cotton, tobacco, or coffee. The Cotton Exchange of New York City is a good example of this class.

Produce exchanges are distinguished from stock exchanges only in the character of their trading; the general organization is the same. Some questions of administration, however, differ from those of the stock exchange. The rates of commission vary with the character of each commodity dealt with; for instance, the rate on grain may be one-eighth of a cent per bushel,

From drawings owned by Ramsey & Co.

BUYING and selling on the Chicago Board of Trade is facilitated by a language of signs and signals peculiar to this institution and perhaps unlike those used on the floor of any other Exchange in the world. To the casual visitor watching the crowds congregated about the different pits during the times of a flurry in prices these signs have no intelligible meaning, but to the experienced trade a simple movement of the hand attracts attention and at the same time conveys all the information necessary to consummate a trade. This language has developed with the growth of the Board and its use has long since become a necessity. Because of the turmoil and the hurly burly occasioned by the large numbers seeking to attract attention in the excitement of the hour, which, when accompanied by the click of hundreds of high keyed telegraph instruments and the scurrying hither and thither of an innumerable number of messengers and errand boys, makes articulate speech almost inaudible and impossible. Then, too, the eyes is quicker than the ear, and the signals given with the hand or by a gesture of the head means as much as a telegram to the party addressed and oftentimes permits the closing of a trade when, if time had been taken in an attempt to reach the side of the party making an offer, some change might have taken place in the market and the opportune moment would have been lost.



The sign-manual of the pit trader is simplicity itself, and with a very little practice anyone can become adept at it; but that is not to say that it will perfect him as a master in the strategy and generalship demanded of a good broker. For instance, wheat having sold at 90 cents, a trader catches the eye of some one opposite in the pit who has 50,000 bushels to sell, and partly by telepathy, partly by a motion of the clenched fist, signals that he will take the "50 wheat" at 90. The seller, in reply, holds up his right hand with the index finger extended horizontally, indicating that he wants 90⅛ cents. The buyer motions acceptance and signals back "⅛.". The two traders note on their cards "Sold 50 at ⅛ Jones" and "Bot 50 at ⅛ Smith." After they leave the pit they meet and check the operation.

The hand being held horizontally, the clenched fist indicates the price in even cents. Each finger represents an added eighth of a cent up to five eighths; the extended hand with the fingers close together means three-quarters, and the thumb only signals seven-eighths. But the whole hand displayed vertically means 25,000 bushels, each finger counting 5,000 bushels; whether offered or being bid for, is shown by a slight motion of the hand to or from the trader making the signal. The official reporter stationed in each pit sees all the signalling, and partly by observation and partly on information given him by the traders, notes the latest price and gives it to a telegraph operator at his side to be "put on the ticker." Thus the price of grain is made every moment of the session and transmitted to all the markets of the world.

FIG. 9.—Sign Language Used by Traders on the Chicago Board of Trade

while that on short ribs may be 12½ cents per thousand pounds. The schedules of rates on different commodities differ considerably.

Another matter in which there are differences is the inspection of the commodities dealt in on the exchange. This inspection corresponds in a manner to the listing of securities upon the stock exchange, but is far more complicated. The object is to separate the various commodities into grades, and in some instances the principal grades are again divided into subgrades. The purpose of these grades is to establish a definite contract grade on the basis of which trades for the future may be made. Some commodities, such as tobacco, flour, and live stock, have an individual value which makes it almost impossible to fix a contract grade upon them. They must in most cases be bought upon personal inspection upon a "spot" market.

Two methods of operating prevail upon the floors of the stock exchanges. One is by sample trading and the other by contract trading. The floor of an exchange is usually divided into two parts, the sample room and the pit. In the sample room are displayed samples of the various commodities and trading there is accomplished by personal inspection of the various commodities.

Contract trading takes place in the pit in much the same manner as securities are traded in upon the stock exchange. These transactions are on future contracts and for future delivery. Warehouse receipts are passed between traders instead of actual commodities. If an operator buys a certain number of bushels of wheat he does so with the understanding that he will accept and settle for what he has bought on or before delivery day when the wheat must be tendered him; vice versa, he agrees to deliver the wheat if he is the seller.

Fig. 10.—The Wheat Pit of the Chicago Board of Trade in Action During an Exciting Moment

FIG. 11.—The Cash Grain Department

All deliveries must be made on the last day of the month, when all settlements also are made, and if the operator is unable to meet his contracts, it is at once a confession of insolvency and his contracts are bought in for his account on the same basis of settlement as on the stock exchange.

In the grain quotations in the daily press, it is to be noticed that the grain concerned in the trading is designated by different months. This implies that all sales and purchases are for the wheat or other coarser grains, which must be settled for on the last day of the designated month. Figures 9 to 13 illustrate some of the operations on the Chicago Board of Trade.

Crop Production

It seems to be the fate of large agricultural nations that their exports of agricultural products grow smaller as their population increases. It was not so many years ago, it will be remembered, that our export of wheat was depended upon by financiers to establish for us a large credit balance abroad, thus providing gold to import when it was most needed. But for this purpose we can no longer depend upon our wheat. In fact, we raise now only one important staple which we still sell abroad in large quantities—that is our cotton.

James J. Hill hit the nail on the head when he described our decline as a wheat-exporting nation. He said it was to be expected that we should not have much to spare after feeding the mouths of 90,000,000 people. It was not that we grew less wheat but that we were not keeping pace in increasing our acreage. We are a much larger family today than ten years ago and use for our own domestic purposes the bulk of the crop.

Our greatest crop in quantity is corn, but we do not

export as much of it as we could spare. Our corn crop has grown steadily until now it causes no surprise when the yield reaches such an enormous total as 3,000,000,000 bushels annually.

If the people of Europe set a higher value on corn, we should have a nucleus for an extremely important export business. But people abroad do not take kindly to corn, still considering it largely a food fit for live stock rather than for human beings.

The annual value of our harvest, including all the live stock and dairy products, as computed by the Statistical Division of the Department of Agriculture, amounts to more than $9,000,000,000. Of this wealth the corn crop alone contributes nearly 20 per cent; wheat comes next; after that the cotton yield. The value of minor crops, such as hay, rye, flaxseed, etc., runs into the hundreds of millions; so also with that once despised growth of uncultivated fields, alfalfa, or long shoot grass. The hen, with whose industry even the busy city housewife is thoroughly acquainted, contributes each year nearly $200,000,000 to the nation's wealth.

The output of our fields is really the corner stone of our prosperity. As it is all new wealth, reproducing itself every year, it can be readily seen how much every artery of business depends upon our harvest for its life. It is this wealth which supplies the blood that keeps trade going along briskly. While our mining industry comes next in importance, its prosperity largely depends upon the continuation of good harvests.

The smaller the crops we raise, the less is our prosperity. A crop failure would be disastrous. Fortunately, for a good many years we have escaped such a calamity. Our immunity from such a misfortune for nearly twenty years is largely credited to the gradual improvements in

Fig. 12.—Clerk Has Received Telephone Order from His Office to Sell "Ten Thousand May Wheat" and is Signalling Same to the Firm's Trader in the Pit

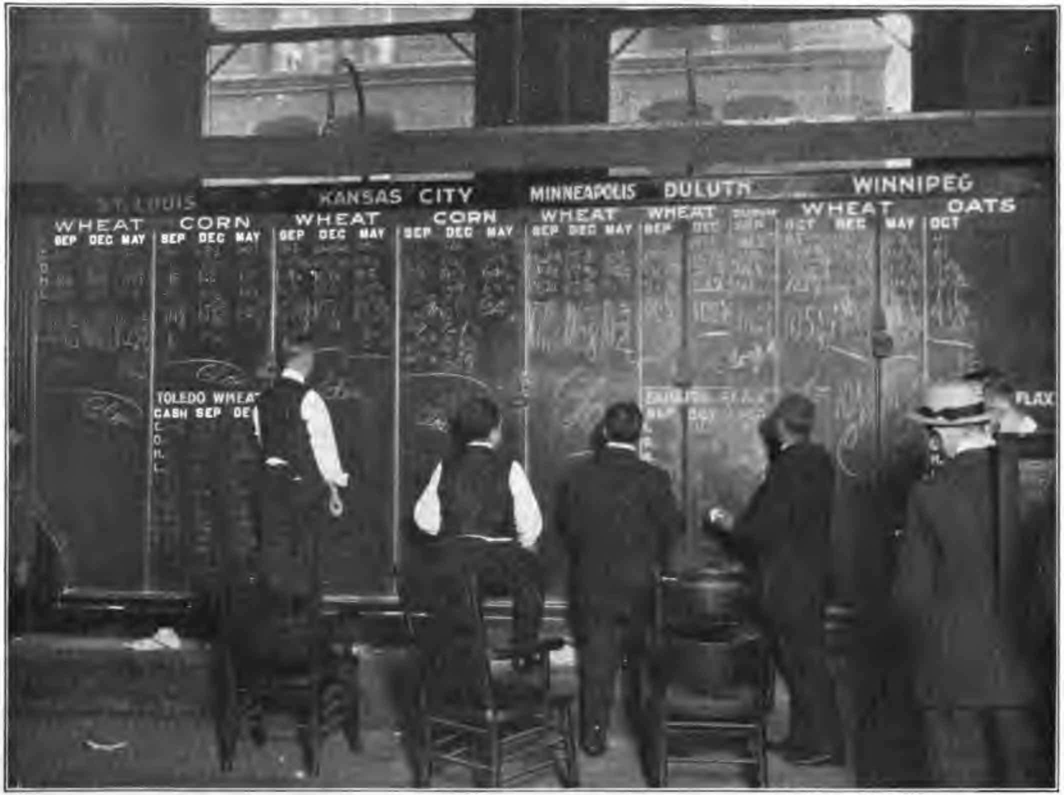


FIG. 13.—Market Board in the Trading Room Showing the Grain Quotations from Six Different Markets

our agricultural methods. Whether this is true or not remains to be demonstrated. There are many who doubt that this is a logical explanation, and the consistency of the weather supports at least to some extent their skepticism.

Crops and Speculation

But this is neither here nor there. The point I wish to make is the natural evolution in speculation in these important staples, in which the operators specializing in them are concerned to no greater extent than are the operators in stocks and in cotton. For them all a large crop spells prosperity; a short crop, a period of adversity; and it is quite natural that all keep a sharp eye on the weather conditions and the preliminary crop estimates which the Government publishes during the growing season.

But the large grain houses do not rely entirely upon the Government's figures. The majority, to supply their clients with intelligent information as to the progress of the different crops, employ men to travel over the crop belts and make their reports. These men, because of their training and keen perception, have acquired the reputation of being crop experts. A number of them from their reports might also be said to have an inclination to regard themselves as naturalists, for in their own vernacular they have added some species to the bugs and insects destructive to farm products. One species in particular is the June bug, which very few people knew until the crop experts discovered it.

When spring bursts upon us, the crop experts are busy, and until the season closes and the several crops are safely in the barns, we may have a half-dozen crop scares caused by the different conditions, such as lack of mois-

ture, bugs, a protracted dry season, or early and severe frosts. Still, were it not for all these elements of uncertainty interspersing themselves in the period between the seeding and the final harvest, there would be little speculation.

It is from these uncertain elements that differences of opinion arise which make bears of some people and bulls of others, while stock-market operators, though only on-lookers, nevertheless form their judgment as to the course of their market from the crop prospects, and strive to anticipate them correctly in their commitments. Furthermore, there are a large number of industrial corporations and railroads, known as the granger roads because they largely depend for their principal traffic on a generous harvest, whose prosperity is vitally wrapped up in our crops. For that reason it is well for every student of finance to know of what importance the crops are to us.

In other directions is the attention of the operator on the grain exchange drawn. He watches the progress of the harvest in Argentine, Russia, and Canada, the three countries which still rank as the large exporting nations, as it is the size of their crops which affects the price of the surplus in our crops that can be exported. A small crop in these countries means higher prices for what portion of our cereals we can sell abroad.

Cotton and Speculation

In the production of cotton this country largely retains its monopoly. Our strongest competitors are Egypt, India, and China. Our cotton crop runs between 12,000,000 and 17,000,000 bales each season. A bale weighs about 500 pounds.

Dealing in cotton is all done on contracts calling for

future delivery, and for brevity they are designated in the market reports as "futures." The quotations are divided into points, each point representing one cent, and so many points make a bale. "Spot cotton" means cotton for immediate delivery and on hand.

There are two principal cotton exchanges in this country—the New York Cotton Exchange and the New Orleans Cotton Exchange. Between them a considerable business is done. The operations on the Liverpool Cotton Exchange are closely intertwined with the dealings upon our own cotton exchanges, for Liverpool is the greatest distributing market for our enormous exports of cotton. The importance of our principal cotton exchange, which is the New York Cotton Exchange, as a center of speculation is apparent from the fact that, next to the New York Stock Exchange, its memberships command the highest price.

The Consolidated Stock Exchange

The Consolidated Stock Exchange of New York was organized as The Mining Stock Exchange in 1875. It altered its name and business in 1886. Although of far less importance than the stock exchange, it is nevertheless a secondary market of no mean proportions. By far the greater part of the trading is in securities listed upon the main exchange, and prices are based upon the quotations made there. The fact that its members make a specialty of broken lots, that is, transactions in shares less than the one hundred unit, is used as a ground for the claim that it is a serviceable institution for investors of relatively small means.

It also permits dealing in shares not listed on the main exchange, and in certain mining shares generally excluded from the other. The rules also provide for

dealing in grain, petroleum, and other products. Wheat is, however, at present the only commodity actually dealt in, and this is due solely to the permission to trade in smaller lots than the produce exchange unit of 5,000 bushels.

There are over twelve hundred members, about four hundred and fifty being active. The memberships have sold in recent years at from $650 to $2,000. In general the methods of conducting business are similar to those of the larger exchange and subject to the same abuses. A form of listing requirements is prescribed, but the original listing of securities is very rarely used.

Miscellaneous Exchanges

Among the other exchanges the Boston Stock Exchange is by far the most important. The principal securities on its boards are largely mining stocks, chiefly copper. But even of them the New York Stock Exchange has absorbed a large number. The transactions there are along lines similar to those on the New York Stock Exchange.

The Chicago Stock Exchange has an imposing structure for its home but transacts relatively little business. This exchange has never recovered from the shock it received when the Moore Brothers first took their flyer on a large scale in the stock market, using the Diamond Match Company shares as their object of manipulation. As a result of their operations, the Chicago Stock Exchange, which was then located at Dearborn and Monroe streets, was forced to close its doors for a few days to prevent a panic. All the brokers, when they tried to liquidate their Diamond Match Company stock, found there was no market upon which to sell, and the exchange stopped doing business temporarily to enable

FIG. 14.—The Consolidated Exchange

brokers to effect private settlements. The disastrous experience of the Moore Brothers spread the belief that the Chicago Stock Exchange did not provide a market big enough for large operations, from which impression it appears never to have recovered. However, a number of corporations which formerly maintained transfer offices only in New York and permitted their securities to be traded in on the New York Exchange alone, are opening offices in Chicago and adding their stocks and bonds to the Chicago Exchange.

Conditions on the Philadelphia Stock Exchange are similar but less pronounced. The principal securities, like Lehigh Valley and the Philadelphia Company, which were once the popular stocks on this exchange, have finally found their way to New York City, which seems to be the logical center for all securities, and to which they finally come when ready for the broadest market.

There are smaller exchanges in the other leading cities like Cleveland, Cincinnati, Pittsburgh, and St. Louis, but the business done on them is in small proportions and hardly worth mentioning. Even that small business is all in local securities. While all these points are important financial centers, most of the transactions in securities are made over the counters of the investment concerns.

The younger members of the Pittsburgh Stock Exchange tried, in the hope of reviving operations on a more extended scale, to introduce dealings in mining shares. For a while their plans met with partial success, but it was a dangerous innovation, as results soon proved. As most of the shares were in mining enterprises in the early development stages, the operations resulted disastrously in most cases to all who participated in the speculation, and this was mainly caused by the enthusiasm of

the brokers, who, although ignorant in the first place of the fact that such securities are in most cases precarious speculations, still were desirous to give them a rousing introduction by a campaign of manipulation which ran prices up to excessive heights. The fall was sudden and disastrous. The exchange has not yet recovered from this ill-starred episode.

San Francisco has a mining exchange, where the nature of the mining business is better understood, and as the city is the natural banking center of the industry, it is also the logical market for these securities. There are smaller mining exchanges in Salt Lake City, Butte, Duluth, and Colorado Springs.

The development of the oil industry in California has brought into existence an exchange for dealings in oil stocks. Whether it is to become a permanent exchange remains to be seen. When oil was first discovered in Pennsylvania, Oil City had an oil exchange and it throve while the excitement lasted. But as an important factor it passed away with the collapse of the oil boom. Such was also the case in Beaumont, Tex., when oil was first discovered in that part of the state. It, too, went out of existence with the passing of the boom.

Curb Markets

With a brief mention of the New York and Boston curb markets, I shall have finished with the principal exchanges in the country. The New York Curb is a semi-organized stock market held in the open air during exchange hours. It occupies a section of Broad Street. An enclosure is made in the center of the roadway by means of a rope within which the operators are supposed to confine themselves, leaving space on either side for the passage of street traffic; but during days of active trad-

ing, the crowd often extends from curb to curb. Until recently there was no sort of control over the market. The brokers who traded there were under no rules or restraint whatever. Any securities could be listed there, for a listing meant merely that some broker introduced it to the other brokers who were willing to execute orders in it.

Fortunately for the curb, an important reform was inaugurated in the formation of an organization to supervise its conduct and to pass upon all securities and the character of the brokers. There are about 200 subscribers who contribute to the maintenance of the expenses of the curb. An agency has been established by common consent through which the rules and regulations are prescribed. This agency consists simply of a single individual who through his long association with the curb is tacitly accepted as arbiter.

The curb affords a public market where all persons can buy and sell securities which are not listed on any organized exchange. There is nothing on the curb which corresponds to the listing processes of the stock exchange, though a slight investigation is made by the agent of the curb of the securities offered. Yet the fact that a security is quoted on the curb should create no presumption in its favor. Some of the securities are meritorious, and quite an array of securities now listed on the stock exchange have found their way there through the curb market.

It has been stated that about 85 per cent of the business of the curb comes through the offices of members of the New York Stock Exchange. A provision of the constitution of that exchange prohibits its members from becoming members of or dealing on any other organized stock exchange in New York. Accordingly operators

on the curb market have not attempted to effect a formal organization. This condition is perhaps responsible for some of the ill repute into which the curb market has at times fallen.

The Boston Curb Market was organized in the same way a year ago and is now housed in a building. While a few industrial stocks are dealt in on both these markets, the principal listings are in mining stocks.

Foreign Exchanges

The most important market for our securities abroad is in London. There some of them are listed on the stock exchange; the greater number, however, are listed on the curb. There is a difference in time between the London and New York markets of about five hours, a sufficient margin for trading between the two. American traders will sometimes sell in London five hours ahead of the New York market and buy their stocks back in New York the same day, expecting to profit by a decline here as a cause of a weak opening in our stocks in London.

The London market quotations sometimes exert a pronounced influence upon our own shares, and consequently stock market operators closely watch London prices which are on hand before our own day's business session begins.

There is some dealing on the Berlin Bourse in the American stocks, but not to an extent worth mentioning. Of late, France has shown considerable interest in our securities, a few of which have succeeded in forcing their way into the sacred precinct of the "parquette," which is the bourse proper. But the majority of American securities in the Paris market are still kicking their heels

out on the "Coulisse," which, as a market, corresponds to our curb.

Holland, next to England, is the most important market for American securities.

Listed and Unlisted Securities

We hear a good deal pro and con about listed securities. The subject is very much discussed, not only wherever security buyers congregate, but frequently in the financial columns of the newspapers. The most convincing argument brought forward by the champions of listed securities is that the latter have a market and bear a fixed quotation. That is to say, they can be sold when it becomes necessary to sell them. Their point is that individuals, when they make an investment, wish to be in a position where they can always sell what they buy. Then they also contend that it is much easier to obtain loans upon securities listed on some exchange. But fallacy is to be found in all their arguments.

Standard Oil shares are not listed on the stock exchange. This security is traded in on the open market and there is not the least difficulty experienced in quickly finding a buyer, should one wish to sell the stock, nor will a person be turned out of doors by any banker if he wishes to borrow any money, as there is no more desirable collateral for a loan than the shares of the Standard Oil companies. There are any number of other desirable stocks in a similar position. A few which might be mentioned are Royal Baking Powder, Singer Sewing Machine, American Typefounders, Otis Elevator, and Borden's Condensed Milk.

In the final analysis, it is not whether a stock is listed or not which gives it marketability, but its intrinsic merit as an investment. This is what the buyers of stocks first

consider, and quite properly. Furthermore, this element is also what bankers first seek to determine when making loans—or at least they should do so. If a corporation is doing a large business, has for years paid good dividends and continues to pay them, then it should not be difficult to sell the stock when the occasion to do so arises, or to borrow money upon it.

Listed stocks are decidedly at a disadvantage with nervous security holders, for any extreme fluctuations in their prices might prompt them on the spur of the moment and without thinking, to sell when they should not, or buy when they ought to let them alone.

There are also many securities listed on the stock exchange, which, so far as commanding a ready market is concerned, might as well never have been there, so inactive are they. Nor is this to their discredit. It may be, as it often proves, that the shares are so closely held by investors that very little stock comes into the market. The position of the shares of the Eastman Kodak Company of Rochester, N. Y., is an example of this. The stock has paid such good dividends for years that those who own it are reluctant to part with it. The shares of the express companies, although also listed, have been inactive much of the time for the very same reason. There are some listed stocks in which sometimes days will pass without as much as a hundred shares changing hands.

I mention this only to prove that all the advantages are not always with listed stocks. There are a great many equally good securities not on the exchange which it would be the height of folly for investors to ignore because of their absence from the listing department.

When a person buys a security he is prompted to do so because of its value and prospects. That is the cardi-

nal principle in making profitable investments and no one will dispute the argument. While I am not decrying the advantages of securities that are listed, I at least cannot see that it is a mistake when a corporation fails to place its securities on the exchange.

I have been told by directors of corporations that they have refrained from listing their stocks because of a fear that if they did so the stocks would be in danger of being manipulated, whereas it is their desire to keep the stocks free from all stock-juggling and have them sell strictly upon their merits. In taking this view they are quite right, for nothing will prejudice a security in the opinion of the public more quickly than a suspicion that the fluctuations in its market prices are artificial. There is no way to prevent this being done on the exchange should some of the brokers conclude they could make a good profit by buying quietly a block of stock and then, by a display of strength in the quotations, distributing their stock on a scale of rising prices. After they are through with their maneuvering, the stock may decline rapidly in price to the great impairment of its market position, although nothing has happened to depreciate its intrinsic merits. This is what makes some corporations hesitate to list their securities.

When the Governors of the New York Stock Exchange devise means to make manipulations extremely difficult, I am inclined to think the hesitancy shown by directors of the smaller corporations to list their stocks will be very largely removed. Toward this end it has been suggested that brokers be prevented from buying stocks for their own account. Whether or not this is practicable is a debatable question.

As long as a stock has intrinsic merit behind it, returns good dividends, and has borne a good reputation, it is

immaterial from the investor's viewpoint whether it is listed or not. It is well to remember that anything that has value may be sold and money borrowed on it.

TEST QUESTIONS

1. How do produce exchanges differ from stock exchanges?
2. Explain the methods of operation on produce exchanges.
3. What sources of information as to crop conditions have the speculators in grains?
4. What are the two leading cotton exchanges?
5. How does the Consolidated Stock Exchange differ in character and operations from the New York Stock Exchange?
6. Why is it difficult to operate exchanges successfully in smaller cities?
7. Describe the New York Curb Market.
8. What are some of the most important foreign exchanges from the standpoint of American securities?
9. Distinguish between listed and unlisted stock.
10. Is an unlisted stock less desirable than a listed stock? Why? Explain fully.

CHAPTER XXV

PANICS

Kinds of Panics

There are two kinds of panics—the commercial or business panic, and the stock-market panic. A commercial panic affects the country as if it were stricken with paralysis. In most cases it is induced by over-expansion. A stock-market panic is an affair more localized, whose injurious influences may prove of temporary duration only.

Causes of Panics

Some economic theorists attribute the responsibility for business panics to an excess of speculation. I am, however, inclined to the opinion that speculation is rather the symptom of it than the actual cause. It is a human trait, during prosperous periods, when money-making becomes a comparatively easy task, to keep on expanding as long as capital can be borrowed with which to spread out.

The result is an excess in speculation. The more easily profits come, the more daring is the use for which they are employed. Men who have accumulated their fortunes rapidly are anxious to double their wealth, then to triple it, and then to quadruple it. The more they make, the more they want. They blindly plunge ahead without

considering that the pace they set cannot always be maintained. They raise their structures on weak foundations. Therefore, they are totally unprepared to withstand any pressure placed upon their resources by a sudden tightening in the supply of capital, of which they have been free borrowers, and they quickly find themselves financially embarrassed. Creditors demand their money; they cannot always get it. As other creditors are in turn dependent upon them, they are quickly and similarly affected. Like a prairie fire, financial embarrassment then jumps from one place to another, wiping out weak business structures and impairing sound ones. A policy of drastic curtailment is hurriedly enforced in every direction. Capital grows extremely apprehensive and is not obtainable except at usurious rates of interest and only on gilt-edged collateral. Fear also largely enters as a factor into a business panic. In fact it is from fear the name "panic" originates. There is a sudden rush of creditors for their storm cellars, and values are sacrificed and often go begging. It is then that the unprotected suffer the most. They are composed of that class of borrowers who have borrowed until they have nothing left in reserve—no other collateral to offer to protect their outstanding loans when payment is demanded without delay.

Here we find a real estate operator forced into bankruptcy because he was over-extended, there a wholesale merchant, and at another point a large retail merchant. Banks are discovered to be in a weak position, for their loans are in collateral which cannot be marketed quickly, and their reserve in cash is at such a low ebb that they cannot long withstand a run from affrighted depositors.

All this is the psychological side of a panic. While panics are largely the outcome of over-expansion, the

severity of their effect is produced by fear. This is demonstrated frequently enough in the process of readjustment following, when embarrassed ventures are brought back to solvency without any loss to the creditors.

Nor do panics often throw before them the shadows of their coming. They generally burst upon us unheralded and when least expected. The first signs of the panic of 1907 appeared in March, when there occurred a sharp and sudden break in the prices of securities, for what reason few at the time were aware and others only half surmised. The immediate cause was the sudden demand for a large amount of capital from interior banks when the financial centers were unprepared to meet it.

That the stock market should furnish the first warnings of a panic, is but natural. It is here in the first place that over-speculation, the most pronounced symptom of a panic, converges, and as it is a quick market it is to this point also that lenders of capital hurriedly rush to liquidate their loans and get their money back. Months afterwards the effects begin to make themselves felt at distant points.

Signs of Approaching Panics

If we can consider that there are any visible forerunners of panics, carrying warnings ahead of their coming, I should say that they would make themselves apparent in at least three forms, namely, an excess of land speculation, excessive interest rates, and an abnormal shrinkage in the reserves held by the banks. These reserves are the percentage of cash to the amount of deposits on hand to meet the demand from depositors. But these indications are not infallible, for it has often occurred that where there existed all the conditions pointing to a panic, a panic never occurred, correctives being applied in time.

What makes an excess in land speculation a dangerous menace, is that it is the most unliquidable form of collateral for loans in hard times. Buyers cannot be found when they are wanted. Land speculation is also the last extreme of speculation. It marks the period of speculative excesses. Therefore its progress is closely watched by keen students of financial conditions.

The tightening in interest rates denotes a growing scarcity of available capital. Money follows the law of supply and demand, as it is but a commodity in the final analysis. When there is plenty of money interest rates are low, and they increase as it becomes scarce. The difference between loans and deposits in the banks shows their available cash resources. The smaller the difference, the greater the danger to business and the weaker is the structure to withstand the assaults of a panic or fear on the part of creditors.

Stock-Market Panics

Stock-market panics can, however, take place without disturbing the country's prosperity. Their bad effects can be localized. Such flurries of fright are largely caused by the attempt on the part of daring speculators or powerful financial interests to corner certain stocks.

The Northern Pacific corner is an example of this. The late E. H. Harriman, to prevent himself from being excluded as a railroad factor from the Northwest, made an effort to buy enough shares in the open market to acquire control of the Northern Pacific. Opposing his efforts were James J. Hill and J. P. Morgan, who in turn were buying all the stock they could lay hands on to prevent Harriman's securing control. A good deal more stock was sold to both by speculators than there was authorized by the road or was outstanding, with the

result that when the time for the delivery of the shares drew near the sellers began to scent the scarcity of the stock and began frantically to bid for what they had sold and could not deliver, bidding it up rapidly until it touched a price of $1,000 a share. The day will long be remembered in the annals of the New York Stock Exchange, as it was a day of intense fear and demoralization. It meant the ruin of a great many stock exchange members if they could not get the shares of Northern Pacific they sold and in turn would have dragged down to bankruptcy other members who were not concerned in the Northern Pacific speculations but were large creditors of the members who were involved. The warring financial interests were aware of the dangerous conditions and arranged matters so that a private settlement could be effected and by their efforts the danger of a great many failures was averted. The panic lasted but a day. It did not extend beyond the stock exchange. The only individuals injured were the stock market speculators. This case clearly illustrates how a panic may occur on the stock exchange and go no further.

But corners are extremely dangerous things to attempt. They very seldom succeed. A corner, to be successful, must be so operated that the security whose price was bid up to a high figure can be in turn sold readily. It happens at times that this is impossible.

Many corners have been attempted on the Chicago Board of Trade. "Old Hutch," as Mr. Hutchinson was nick-named, tried it a number of times only to find himself penniless in the end.

Young "Joe" Leiter had the idea that a certain crop of wheat would not reach its usual proportions, so he kept on buying all the wheat that the other traders were willing to sell him to be delivered to him on a certain day.

On paper his profits ran into the millions. To turn those profits into cash his corner depended upon the inability of those who sold him their wheat to make deliveries, which would force them to buy it back from him to make their contracts good.

But when the final day for delivery came around, wheat poured in upon Leiter from places where he never supposed any existed. Elevators were ransacked for wheat and it was rushed in cars to Chicago. There was such a deluge of the cereal upon the young speculator that his wheat corner was quickly knocked to pieces, and instead of having profits in the millions, Leiter lost all his fortune and a few millions which his wealthy sire had to put up to square his son's accounts.

Another spectacular speculator who came to grief on the Chicago Board of Trade as the result of his efforts to corner wheat, was "Ed" Patridge, and most of us still remember the Waterloo which overtook Sully when he attempted to corner the available cotton crop.

There have been men, though, who successfully operated corners. One of these is James Patten, the Chicago speculator. He has cornered oats, wheat, and cotton successfully in their turn and has reaped millions as his gains for his daring. He now says he has withdrawn from the market. If he holds to this resolution he will retain his millions, but should he venture back into the pit and try to repeat his speculative coups, there are many who believe he would lose what he has by trying to run a corner once too often.

It is fortunate that the stock exchange does not tolerate any attempts to corner a security, as it realizes the harm which may arise from such attempts. Through its discretionary power it can enforce private settlements and largely interfere with the profits which could be

made from a corner, and this of course discourages any deliberate and preconceived plan to bring a corner about. The Northern Pacific corner served as a good lesson towards this end.

Prevention of Panics

The practical problem that presents itself out of this discussion is the question whether it is possible to prevent the recurrence of panics. It seems that it ought to be possible to prevent stock-market panics by proper rules strictly enforced upon the exchange.

A commercial panic is a more serious and far-reaching affair. Such crises are a product of modern methods of competitive, capitalistic production, and in the last analysis result of a lack of adjustment between production and consumption. A break-down in the credit system finally precipitates the inevitable.

Panics perhaps cannot be wholly avoided. They are the price a progressive society pays for its advance. Their disastrous effects may, however, be greatly lessened by wise currency legislation giving elasticity to demands and allowing effective mobilization of credit reserves, by greater care in granting credit, and by more systematic direction of individual effort.

TEST QUESTIONS

1. What are the two leading types of panics?
2. Is speculation a cause of panics? Explain.
3. What is meant by the psychological factor in a panic?
4. What are some of the signs of an approaching panic?
5. What is meant by a stock-market panic? What is its industrial effect?
6. Give examples of some famous stock-market panics.
7. Explain what steps may be taken to prevent panics.

CHAPTER XXVI

POOLS AND MANIPULATION

EXAMPLES OF MANIPULATION

A great deal of the speculation on the New York Stock Exchange is artificial. By this I mean that it fails to reflect the actual transaction in securities by the trading public. Such artificial speculation aims to incite, through a display of activity, a buying or selling movement in certain securities, and then leaves the attainment of its purpose to the impetus such efforts have started.

A number of brokers will often organize what we call a pool, to exploit certain stocks. Many such pools are constantly operating in the stock market, especially when the trading is active. They work with great cleverness. They pull their strings behind the scenes and only the shrewdest market observers can trace their operations.

Only when some cog in their plans slips, as occurred in the case of the Columbus & Hocking Coal & Iron pool, does the public get any inkling how pools operate, and then when their operations become known, the revelations do not always reflect credit upon the stock exchange.

What happened to the Columbus & Hocking Coal & Iron pool was this: The members of this pool, after they had succeeded in rigging the price of the company's

stock to over $90 a share, began to suspect that the public could not be induced to buy their stock at fancy prices. They grew apprehensive about getting rid of their holdings, and to get out whole they started to betray one another in their selfish desire to protect themselves. When this treachery became known, there was a sudden rush to sell, and within a few minutes the pool was smashed. The stock, which only an hour before had been quoted around $90, declined rapidly and did not stop until it touched a price of about $10 a share. Two stock exchange firms which were financing the pool failed, while James R. Keene, the pool's manager and manipulator, lost not only a big slice of his fortune, but a goodly part of his reputation likewise.

To be successful, a pool must sell its accumulated holdings to the public at a profit, but in this it does not always succeed, since the public is at times too wary to be caught.

An amusing instance showing what strange effects can sometimes be brought about by a slight mishap in orders given by a pool, occurred in 1910 in the preferred shares of the Rock Island Company. It seemed that on the night before this incident happened, a leading operator in this stock, who was managing this pool, placed large buying orders in the stock with different stock exchange members, but forgot at the same time to give enough selling orders to balance the fluctuations in the stock so as to make them appear normal and not arouse any suspicions. What took place was startling. The simultaneous appearance of these large buying orders without any offerings of the stock, resulted in a sky-rocket advance of $30 a share in the price in less than fifteen minutes, and when it became known that a serious blunder had been made in the distribution of the orders, there

was a foot-ball rush to sell, the stock sliding back quickly to the price from which it had started but a quarter of an hour previously. The error ever after put the stock under suspicion. The public would have none of it, and for months afterwards Rock Island shares were carefully shunned by speculators.

Operations of Pools

The way in which pools operate is interesting. A group of stock exchange members will agree to form a pool, which in some instances they call a syndicate to provide a more dignified tone to their scheme. Pools are not always formed by members; they may be organized by speculators who in no way are affiliated with the stock exchange. Each member of the pool agrees to handle a certain amount of the stock in which the pool is interested, and these orders are distributed at scale prices over a certain period of time. In this manner efforts are made to induce activity in whichever direction, up or down, the pool plans. If the pool's plans are successful and it has succeeded in distributing at a profit what stock was purchased, or has covered what stock was sold short at a profit, a distribution is made among the members.

Sometimes a pool makes enormous profits, and the losses are equally great where a pool's plans meet with defeat. A powerful pool was organized in United States Steel common stock in 1907, in the midst of the panic. This pool, fortified with millions of capital and aided, as some authorities claim, by the Steel Corporation itself, which through its charter is empowered to deal in its own securities, persistently bought all the stock coming upon the market. This buying kept United States Steel common stock like a rock, notwithstanding all pressure,

around $20 a share throughout those parlous days. The firmness in the price of the stock had the desired influence when confidence and reason again returned. The strength of United States Steel common stock was a topic that was on everyone's lips and firmly implanted in the public's mind. The stock became the popular speculative medium and steadily advanced in market value until it touched a price near $95 a share. In the interval, the rise in the stock was assisted by a number of increases in its dividend. The millions the pool had to use to support the stock were multiplied a number of times by the advance in its value which followed.

In some financial quarters pools and their purposes are justified by the claim that the public will not notice a security, irrespective of what merit it possesses, unless there is some leadership, and it is such leadership that they aim to supply.

Probably there is some logic in their contention. Yet not all pools are organized on such a praiseworthy plan. Quite often they are formed to tempt the trading public with securities at prices wholly out of proportion to their intrinsic values. Most of the criticism involving the New York Stock Exchange in recent years may be directly traced to operations of this character.

Evils of Pools

Pools are largely responsible for the manipulation in stocks, about which so much is written and which is so frequently mentioned in the financial reviews in the daily press. The weight of their orders makes a stock rise or fall and often to such an extent as to frighten real holders to throw their shares upon the market or cause a scurrying to buy in anticipation of a good advance. Pools work upon the avarice and credulity of the public or on its fears.

Before Governor Hughes of New York State appointed a committee of citizens to investigate the operation on the stock exchange with the purpose of recommending reforms for the protection of the public, pools were allowed to carry on their manipulations with almost no restraint whatever. While "wash" sales and "matched" orders were not openly tolerated, they were secretly connived at and permitted.

But this sort of deception is now largely a thing of the past as a result of the investigation made by Governor Hughes's committee. Another practice, now forbidden, is the one by which a member was allowed to bid for or offer a certain price for a large block of stock, but did not have to execute the order unless exactly the amount of stock his order called for was offered, or taken, at his price. This practice allowed a member to bid $160 for a block of 10,000 shares, all or none, when the price was only $150, very well knowing beforehand that no member could fill his order. Orders like this were mere bluffs made ostentatiously to impress the public. Now a member, whenever he makes a bid, must take stock in whatever blocks it is offered and this, of course, negatives the sort of manipulation just described, which is designed to deceive the public.

All manipulation, however, does not spring from pool operations. Some of it is caused by large underwriting bankers who in issuing a new lot of securities listed on the stock exchange, bring about an advance in the price of the already outstanding securities in order to create a good impression for their prospective financing and secure for it a successful reception on the part of the public, which is more likely to be keen for anything indicating a likelihood of a quick profit.

On the floor of the stock exchange are arranged rows

of posts, around each of which gather the traders who trade in a certain security. To facilitate the trading, each member selects some stock of which he wishes to make a specialty and makes his headquarters while on the floor at the post allotted to his security. Thus one member acts as specialist in Reading Railroad stock, another in Union Pacific shares and so on. For the more active shares there may be a number of specialists to each. They execute orders in their specialties for a commission of $2 for each one hundred shares when the orders are from fellow-members. In this way members are saved a good deal of running about on the floor of the exchange and also much of their time.

But the specialists in the more inactive shares are often subjected to severe criticism. They are in a position to make a good deal of money if not over-scrupulous. They are in a position to execute an order of their own before that of a customer. For example, a customer gives a market order to sell 100 shares of an inactive stock. The specialist can, if he is so inclined, break the price three or four points and buy in the stock his customer sold. To the next buyer who came along he could sell this very same stock at an advance of two or three points, making not only his commission from both seller and buyer but also the difference in price. I don't say that this is done, but contend that it can be done, and believe that among the much-needed reforms is a more stringent supervision over the specialists in the more inactive securities.

Pitfalls of Speculation

I cannot attempt to elaborate upon the many different pitfalls dug by crafty schemers to catch unwary and ignorant speculators. On this one subject alone a book might be written. The bucket-shops have proved the

principal menace to the public, but fortunately they no longer exist to the great extent they once did, now that the Government has gone after them with a big stick. A bucket-shop, as already described, is nothing but a gambling room. Bucket-shops can carry on a prosperous business only by misleading their patrons. This they do by inducing them to take on stocks likely to decline or sell stocks more liable to go up.

It is always best for a person who wishes to deal in stocks or commodities to carry on his transactions through a member of a regular exchange, as such transactions thus come under the supervision of the members, who are compelled actually to execute all their orders. For a member to be caught "bucketing" orders means his expulsion from any reputable exchange. In dealing with members a patron is also dealing with persons of more or less financial responsibility whose commission is sufficient compensation for the services they perform. Moreover, it is possible for a customer, when transacting his business through a member, to check his orders from the official records.

"Tips" on the market are the bane of speculators. They prove the ruin of a great many. A speculator will hear from someone about whom he knows nothing and with whom he has scraped up a passing acquaintance in some brokerage office, that such and such a stock is either going up or about to have a big break. He hurries to get in on the "good thing." In most instances such tips are mere guesses. On such flimsy foundations many speculators will sometimes stake a small fortune. Is it then any wonder that they soon lose all their money? Other speculators will pay a weekly or monthly stipend to some advertising tipster for inside information. The value of such advice is plainly apparent when it is known

that if these self-criers of their ability to forecast prices were correct about only a small part of their prognostications, they could retire in a short while with great fortunes. Yet these financial charlatans month after month catch a new crop of suckers; otherwise they could not continue in the game as long as they do.

It is a remarkable phase of human nature that prompts individuals to back with their money the claims of perfect strangers, for when it comes to buying even a pair of socks they will inspect them closely to be sure they are getting what they bargained for. Were this not a fact, no such schemes as the 520 per cent Franklin Syndicate operated by a clerk by the name of Miller, or the Dean Syndicate and the Storey Cotton Syndicate operated by ex-convicts, would be possible. These were all blind pools, so to speak. They advertised that speculation could be conducted profitably and without loss and would declare out of their supposed operations big weekly dividends. The Franklin Syndicate, while it lasted, paid 10 per cent weekly dividends. They secured some person in a community as a customer and it would not be long before the dupe would be telling all his neighbors about the fat dividends he was receiving. The result would be that the cupidity of others was aroused and they also fell victims.

Their schemes were simple. The dividends paid came from the money their dupes sent, and not from speculation. In the early stages of the crooked game, the dividends paid did not amount to very much and for every dollar distributed in this way they were sure of ten more coming back. Few of their victims ever got their money back, for they kept sending more money than they received so as to increase their large profits. A day must come when such schemes as these are raided or their

operators decide to make a big clean-up. Then all their dupes find that they have not been speculating but have been swindled out of their money.

Luckily, such discretionary pools, as they are styled, have ceased to exist. The authorities are now too watchful. But in their place have sprung up individuals who will handle speculative accounts for clients for a share of the profits. They catch their full measure of victims. These people are merely gambling with their clients' money. If they guess rightly, they take a share of the profits; if not, their customers, not they, lose money.

Rules of Caution

In the first place, no person should speculate who has no knowledge of securities. One must not forget that intrinsic value and possible increase in income return are the moving forces behind a rise in the price of a security, and conversely, a depreciation in the intrinsic value and the likelihood of a reduction in the dividend, are behind a decline in the price of a security.

Such possibilities can be detected only by close study of prevailing conditions and by thorough analysis of the earnings statement, as published by corporations.

In fact, to be successful in speculation a person must devote as close study to conditions as he would to any profession he desires to master.

Speculation is a rich man's pastime, not a poor man's road to fortune. The latter has no business in it. A rich man is in a position to recuperate his losses by patient waiting. If he is a buyer, he can take his securities out of the market, put them away in his strong box and bide his time until they not only recover their price but go high enough so that there is a profit in them for him. If

he is a seller, he can close his transaction and sell again at a higher level until the decline he anticipates takes place. But even then men who adopt this method are not always right in their conclusions.

The most successful speculators are the actual investors who buy their securities outright after a severe break in prices and store them away until a recovery occurs in which they can resell at a profit. They do not buy more than they can well afford to buy and as they own the securities outright they cannot be called upon for margin.

TEST QUESTIONS

1. What is meant by pools and manipulations on exchanges?
2. Explain the operation of the Columbus & Hocking Coal & Iron pool.
3. Explain the method of operation used by promoters of pools.
4. What are some of the chief evils of pools?
5. What are some of the pitfalls of speculation by means of which an outsider is often trapped?
6. What are some good rules of caution in connection with speculation?

CHAPTER XXVII

THE PROMOTER'S PLACE IN FINANCE

The Promoter's Method of Working

He who proves himself a successful and capable promoter is a very useful individual. As the difficult task falls to him of bringing capital and opportunity together for their mutual exploitation, no one can dispute that such men, when honest in their efforts, really perform a very valuable service when they succeed in raising capital to finance legitimate and meritorious enterprises.

In reality they are the men who find legitimate opportunities in which capital may be profitably employed. Born optimists as they are, they are never at a loss to devise methods of presenting their projects in a form sufficient to interest people of means.

Today, many cities and towns are richer in new industries, electric light, gas, or water plants, or transportation facilities, because of the efforts of some promoter whose confidence that such ventures would prove profitable induced him to devote all his time and energies to raise the required capital to start them. Many communities owe their railroad facilities to the same tireless boomers.

But not all promoters are upright and honest. Some are shifty and dishonest and are in the business to plunder investors. Honest promoters are constructionists; they are the men who do things in an honest way, never

undertaking any proposition unless they are first thoroughly satisfied it is sound, and then sticking to it until it is a success. The crooked promoter is the reverse; he is an individual who is not only indifferent as to the ultimate outcome of a project, but mercenary, since he has but one purpose always in mind, which is to use his schemes to unload stocks or bonds on investors, caring little whether the securities are sound or not. His schemes are only traps to catch the dollars of the public, and are not newly developed opportunities for making money. It is unfortunate that this type of promoter is largely in the majority. Because of their pernicious efforts the business of promoting has in late years come into bad odor, although undeservedly, as it is a line of work that always will be necessary. Men capable of bringing capital and enterprises together will always be required; their services cannot very well be dispensed with.

The legitimate promoter has no brass band to herald him; he works very quietly and unostentatiously. He is a mole who keeps burrowing along without noise. If he is planning a merger of a number of industrial concerns, to bring about greater degree of stability for a certain line of manufacture, he usually starts by obtaining options on the plants and has his plans and statistics showing the possible profits well worked out before he is ready to lay them before capitalists. If he is bent upon building a new railroad or furnishing a community with some very much needed public service, he first has his rights of way or franchises safely tucked in his pocket before undertaking to raise the necessary capital. He never begins half-way, as he realizes the futility of attempting to induce large capitalists to finance his

projects unless he is in a position to fulfill every promise he makes.

Furthermore, a promoter who has a good money-making opportunity and is intelligent enough to present it properly, usually experiences no difficulty in finding capital for it. Capital is hunting him as much as he is seeking it. The promoter, however, whom the public must watch very carefully and be on guard against, is the man who has a half-baked scheme which he wishes investors to finance entirely, taking all the chances. He may be not exactly a knave but simply a fool who imagines he has a good thing and believes he can raise enough money to exploit it by a direct appeal to the multitude of investors. Whether he is a knave or a fool, the result to the investor in the end is equally disastrous, if enough capital is not raised. All those then who have backed the promoter's confident promises with their capital, lose it when the critical period is reached, when more capital is required but can no longer be obtained.

Every year hundreds upon hundreds of such ventures succumb, for from their inception they never really have a chance to demonstrate what they are capable of accomplishing, merely through lack of sufficient capital.

The intelligent and successful promoter guards against such a contingency. He usually deals with wealthy capitalists and large underwriting bankers who are prepared to pledge all the necessary capital to insure the completion of the project before inviting investors to participate. They at least go to all lengths to be sure of their ground. It was in this way the steel merger, copper merger, and a dozen other well-known mergers were organized by shrewd promoters. Their securities may have been watered, but at least they always had a market.

Criticism may properly be directed at this watered

capital, but it must be said in behalf of the original promoters that the holders of their stocks could realize something on them whenever they wanted to sell. As much cannot be claimed for the stocks of the many shifty schemes exploited during the last twenty years, by means of flamboyant and extravagant newspaper advertising. To mention the names of all these would alone require too many pages. Most of the securities issued by these schemers are now worthless. What money the public invested in them has been completely lost.

Only one general rule can be suggested by which an investor may judge the standing of a promoter who is endeavoring to enlist capital. That rule is to find what is the promoter's reputation in the financial community—whether he has any previous successes to his credit; never to accept his mere statements as facts, but to compel him to furnish a complete financial report which will show how much capital his project will require and then what assurances he can give that he will be able to raise it all.

By an investigation of his character it is possible to learn whether the proposition is of a substantial character, or whether the promoter is simply trying to raise a large amount of capital "on a shoe string." Other than this there are no specific rules. There are so many different ventures constantly being brought out and such a great variety in the plans adopted to raise capital, that each proposition must be judged individually and according to its merits.

Wild-Cat Promotion Schemes

Every so often it seems to be our misfortune to run into a boom of some kind or other when the popular fancy for investments turns in one particular direction, and

then the discretion and good judgment which sober-minded people are supposed to exercise are cast aside in a gambling frenzy. If it is not in mining, then it is for the exploitation of a newly discovered oil field; if it is not for that, then it is something else which has taken hold of the public fancy. It is during such booms that the flotation of new securities reaches its flood tide.

A great many people then appear to be obsessed with but a single idea, to acquire wealth overnight. When popular fancy runs wild for a certain class of securities, it is a harvest time for unscrupulous manufacturers of securities.

Yet this is not a phenomenon exclusively characteristic of us. Nearly every other nation is afflicted more or less at some time or other, with the same sort of wild speculative mania. The phlegmatic Dutch had a black tulip craze, when fabulous sums were paid for this bulb. France was turned into a nation of besotted gamblers by John Law with his fanciful Mississippi Bubble, and more recently by De Lesseps and Hirsch with their more ambitious Panama Canal scheme. We are inclined to look upon the French as a thrifty race, yet these incidents prove that they can be aroused under peculiar circumstances to throw millions away on baubles.

In England such promotions have occurred frequently. While France was royally entertaining John Law and pouring immense riches into his lap to squander, Englishmen were no less shorn of all sober sense in their great greed to get the immense wealth which the South Sea trading enterprises (and there were a half-dozen of them) promised to bring. With the same rash spirit they launched upon the wildly speculative schemes converging upon the development of the new gold fields of Africa, and recently something approaching a frenzied boom in

rubber company shares has developed and again collapsed.

Mining and Oil Propositions

There was a boom in 1849, due to the discovery of gold in California, but our first extensive boom which is remembered by the present generation and which reached any large proportions, was the speculation in oil, when the first large oil area in this country was discovered in Pennsylvania. People from everywhere flocked to the oil district. The early comers made money. Their successes lured others. In this way the fever spread until it ran wild and finally died from exhaustion.

The pioneers are the ones who usually make the money in a boom. They are able to do this through the willingness of those who follow to pay fancy prices for their holdings. They, in turn, hand them over to other late comers. The bubble, once started, continues to expand as long as there are people who will take what others have to offer at a good profit, which in boom times attains fanciful proportions. Finally there comes a pause when everyone rushes to sell in an anxiety to cash in their paper profits; but buyers are scarce. Then the bottom drops out of the boom, the bubble bursts, and property or investments which only a short while before were figured in dollars, are not worth cents. Such, in brief, is the history of all booms.

The author distinctly remembers the Texas oil boom, which it was his good fortune to observe at close range from its inception to its collapse. A week after oil was discovered the rush began to the new field. Beaumont, Texas, which was the center of the new field, grew from a small lumber town of not more than 6,000 population to a bustling city of 25,000 people, all this bottomed on a

frenzied hunt for wealth. The Lucas Gusher brought this horde of people. It was spouting oil at the rate of 70,000 barrels a day. This excited the imagination of the masses.

Nothing was easier to estimate than that such a production meant enormous wealth. At fifty cents a barrel the new well was showing a production of $35,000 daily which was all right on paper. If one well could show this, then the profits on a half-dozen would reach enormous proportions. Oil land which could be bought a month before for only a few dollars an acre, jumped by leaps and bounds in price and in a few months was changing hands on the basis of $1,000,000 and over an acre. Derricks were built so close together that it was impossible, in some places, to walk between them. The outcome was a great over-production of oil, for which there was no market. Oil was soon begging for buyers. The price declined until not more than three cents a barrel was obtainable.

But this was not the only mishap that befell the region. The large number of wells drilled on the same spot almost exhausted the field in a year's time. More than a thousand different oil companies were promoted, all with varying capital, from a modest $50,000 to several million dollars. The public invested, it is conservatively estimated, nearly $100,000,000 in actual cash, most of which has been lost, as there are today only a few oil companies compared to the number formerly in this field, and they are largely owned by three or four large corporations.

It is the same with mining. The Cripple Creek, Goldfield, Tonapah, and Cobalt booms sucked up one hundred dollars from misguided investors where they returned one dollar in dividends. Other gold camps are likely to

repeat history. It is not that these camps lack opportunities for successful exploitation; it is due to the public's rushing heedlessly into these things and taking anything offered without investigation, snapping at them like a school of hungry fish at the bait thrown out.

Industrial Promotions

This is what happened also in the great industrial boom following McKinley's inauguration as President in 1897. In those days it seemed that, to induce the public to pour its money in upon them, all promoters had to do was to incorporate a company, plan the manufacture of something, and arrange in their prospectuses a mass of statistics demonstrating how much money could be made. It is needless to say that where things are done thus loosely, the majority of the enterprises never can reach beyond the embryonic stock-selling stage.

TEST QUESTIONS

1. Show how promoters tend to advance economic conditions.
2. What are some of the chief differences in methods between a good promoter and a crooked promoter?
3. What is the rock upon which most ill-conceived or mismanaged promotion schemes are floundered?
4. Why does the public repeatedly bite on wild-cat promotion schemes?
5. Why do mining schemes lend themselves easily to promotion schemes?
6. Explain the waves of promotion that seem to affect a country periodically.

CHAPTER XXVIII

THE GET-RICH-QUICK LURE

EXTENT OF THE LURE

Until recent years, the Get-Rich-Quick Game had attracted little attention. Meanwhile, as an evil in the domain of finance, it grew slowly but steadily until it reached proportions where it actually became a serious menace to our national prosperity. It could no longer be ignored. It spread so far that the states and even our National Government had to devise rigid restrictions to check the invasion upon our people made by the multitude of such schemes which were continually cropping up.

The Get-Rich-Quick Game, as conducted in this country, is no longer a small factor. Ex-President Taft regarded all such schemes as constituting a danger to our prosperity, serious enough to make it incumbent on him to devote a paragraph in one of his messages to recommending that drastic action be taken against these swindles.

The loss the public sustains through get-rich-quick schemes is enormous. The greatest harm naturally does not come to intelligent people, as they are not so easily deluded. By far the larger number of victims are drawn from the humbler classes, the thrifty accumulators of capital, who, being totally ignorant of the first sound principles governing investments, and anxious to make their money yield the largest income, grasp eagerly at

propositions brought to their attention because they promise enormous returns.

Actual Losses

The amount which credulous investors lose in our many different Wallingford schemes to acquire wealth overnight and on a few hundred dollars, cannot be estimated accurately. Still, I believe I am not exaggerating, but underestimating the total loss, when I place the amount at between $150,000,000 and $200,000,000 every year. This certainly is a huge amount of capital to throw away upon ventures which never have had a ghost of a chance to succeed from their very inception, because they were conceived at the start in the womb of dishonesty.

I was asked some years ago by Mr. C. N. Keys, the financial editor of *World's Work,* to prepare some statistics of the more prominent get-rich-quick fakes foisted on American money savers during the last few years. In the preparation of these statistics I went no further back than seven years and included only such schemes as emanated principally from the eastern financial centers.

The statistics I furnished *World's Work* included 42 oil companies, with an aggregate capitalization of $83,448,128; 119 mining companies, with an aggregate capitalization of $527,882,500; and 82 companies of a miscellaneous character, with an aggregate capitalization of $448,269,780. This list was only a partial one and included only schemes still fresh in the public mind. Where one was mentioned there were two score or more unnamed, because space to include them was not available.

Yet in this incomplete list a total capital in excess of one billion dollars is represented. Of this but an infinitesimal part actually went into the development of these

enterprises; the larger part drifted to the pockets of dishonest promoters, went for flamboyant advertising in the not over-scrupulous newspapers, or was squandered on large commissions to stock salesmen and their sub-agents. All the millions that investors threw into these schemes proved a total loss. A country cannot long continue to prosper which will tolerate the snuffing-out of so much of its available capital each year.

Methods of the Confidence Man

The Get-Rich-Quick Game is a convenient blind for the high-class confidence man to hide behind. Until the authorities, following the lead of the National Government, became aggressive and made up their minds that it was high time to stop this form of brazen plunder, crooks and crafty promoters found the occupation of despoiling the masses (from such vantage points as fiscal agents, fake bankers, and brokers) extremely congenial, nor were the risks they assumed great. Compared to them, hold-up men were individuals of some courage, for they at least always invited danger from a counter-attack when they assaulted wayfarers to get their booty. The get-rich-quick shark was seldom in danger of physical violence, for if one of his victims came to seek him out in his office to force him to return his plunder by physical persuasion, he was never to be found around.

The get-rich-quick schemer works along clever lines. He acquires mining claims or a lease on some oil property somewhere near where a real boom is on and at once starts a company, capitalizing it for a large amount; or he may get hold of some new invention, like the wireless telegraph, or the wireless telephone, and subject them to the same process of inflation. This preliminary step taken, he next proceeds to have stock certificates and

attractive literature printed, promising profits ranging from two hundred to as many thousand per cent. Then he is ready for his work of plucking investors of all the money they can spare.

One of their effective schemes is to offer their stock at a low price, much under its par value. They fix on a low price in order to convince their dupes that the investment will rapidly advance in value. In many instances they hold forth promises that their stock will reach a price far in excess of its par value as soon as their enterprise begins to pay large dividends, which are never declared unless fake payments are made and then they are used merely as a bait to be withdrawn later on.

The difference in the price at which a victim may buy stock and what it is sure to reach, according to the promoter, is represented to him as the profits he can easily make. The profit is so vastly in excess of what it is possible for conservative investments to return that the lure catches ignorant and greedy investors, but not intelligent people, who will investigate thoroughly before biting on the mere promises made by people entirely unknown to them.

Another scheme adopted by get-rich-quick operators is to announce an advance in the price of the stock and urge that it be bought for the profit which can be made from the increase in its market value; this is what they all say. If a stock is offered for 10 cents a share and will be advanced to 20 cents a share, it is pointed out that the investor will make 100 per cent. This snare catches a great many victims. The stock has not advanced one mill in value; all that has taken place is that it has been arbitrarily marked up in price. If any effort to sell the stock were made by an investor, he would find out that there was virtually no genuine market for its sale.

All sorts of efforts are made to secure the consent of men having some reputation to act as directors for get-rich-quick schemes; some are innocently drawn into the game through an honest belief that it is a good thing and certain of success; others, again, act for a more mercenary purpose, giving their services in return for a salary or a big block of stock which they expect to sell at a profit.

A few years ago the stock of a certain telegraph company was widely exploited by a concern in the East which was as near to a disreputable promotion as it was possible to get without its authors breaking into the penitentiary. A number of very well-known public men acted as an advisory board, among them a famous clergyman. Yet not one of these men ever attended a meeting of the company. They consented to act as an advisory committee upon the plea of others that their presence would be a guarantee that the enterprise would be free from stock jobbery. The general reputation of these men was proof of their integrity; they were the innocent cat's-paws of crafty promoters behind the scheme, who used their names and high character to inveigle the public into buying the stock. This is by no means an isolated case. Any number of similar illustrations could be given. Get-rich-quick promoters are fully aware of the power the names of reputable men have upon the purse strings of credulous investors, and they employ every means to secure such men as directors in their enterprises.

Sometimes it occurs that men in good repute will believe they have a good thing. Very likely they have, but unfortunately they fall among the crooks in finance, who tempt them with promises of quickly raising all the capital to develop their enterprises and ruin them in a short while by their dishonest operations. This often

happens. I remember a legitimate industrial enterprise which fell among the financial Philistines who robbed it from all sides and finally forced it into bankruptcy. After that experience it was impossible to raise any money for it.

If a fake advance in the price of a stock fails to entrap victims, then fraudulent dividends are tried. The backers of get-rich-quick schemes are never at a loss to spring any coup if it will suffice to bring them money. They will guarantee to buy stock back within a certain time at a higher price, if that will catch a sucker, with no intention of living up to their promises, and as they are financially irresponsible it is useless to start any legal action against them; no money can be recovered after once they obtain a strangle hold upon it.

A few years ago some get-rich-quick mining promoters devised, so they claimed, a plan for a guaranty against loss. The scheme consisted of a trust fund in which were deposited a certain number of shares in each of the companies they promoted. It was a sort of grab box. If the investor was dissatisfied with one stock he had purchased because it did not pay dividends or advance in price quickly enough, he could turn his stock into this depository and take out some other stock which he fancied the more. As all the stocks were equally worthless there was no protection against loss. But it was a good argument and had a good effect while the scheme had the flavor of novelty.

When this plan wore out its welcome, fake bonding companies were started. These companies guaranteed to repay the investor in twenty years, some in ten years, all the money they had paid for a stock, if in the meanwhile it did not prove profitable. This also sounded convincing, but not one of these bonding companies was ever

solvent or could ever live up to its guarantee. After the authorities closed a number for operating an illegal business, all the others quickly disappeared.

Governmental Control

As already related in previous sections, the Government has been carrying on a vigorous campaign to rid the country of fraudulent financial schemes, including the innumerable get-rich-quick ventures. The Government is in the best position to carry on this work effectively. Such schemes cannot succeed unless they are allowed the free use of the mails, as it is by means of the mails that the promoters try to reach investors and to catch them in their claws. When branded as frauds and denied the use of the mails, these fakers cannot very well succeed.

Still this is a slow process of extermination, as it requires an investigation in each case, sometimes extending over months before any retaliatory action can be taken. In the meanwhile a good deal of mischief can be done, for the get-rich-quick schemer is a shifty individual. He does not believe in procrastination; he fully appreciates that it cannot be long before his ventures must attract unfavorable notice and therefore he wishes to gather in his loot before he is smoked out. Nor does he stay long with any one scheme, but transfers his activities noiselessly and rapidly from one to another. Often the same crooked individual, before he lands behind the bars, has foisted on his dupes a dozen or more get-rich-quick ventures. One of them promoted as many as forty-six companies before the Government caught him, each one of which was an out-and-out fraud.

It has been suggested that an effective curb could be placed upon this evil if the government would compel every enterprise offering its stock to the public to take

out a national charter, providing as its principal requirement the filing under oath with the Secretary of the Treasury of a complete statement of its financial condition, which statement would be open to public inspection or of which a copy could be obtained by an investor for a nominal sum. It is claimed, and not without reason, that such publicity would very quickly develop any fraud if it existed and enable the Government to stop any further stock sale until an investigation disproved the charges.

The idea is a very good one. It would be even more effective were all the directors forced to acknowledge under oath the genuineness of the financial statement filed and if it were further provided that any perjury or false swearing was punishable with a jail sentence, instead of a fine. Then it is likely individuals who valued their good names would use the proper precautions not to connect them carelessly with any fraudulent promotion.

The several states have undertaken the regulation of promoting enterprises in various ways. Banking and financial institutions are generally placed under strict supervision. A number of states control the issuance of securities by railroads and public service corporations by means of public utility commissions. Other states have attempted to regulate the issuance of stocks and bonds of all industrial concerns by means of legislation. These laws usually provide that before any new securities may be offered for sale, the concern proposing to sell them must file with some state officer a detailed report about its financial condition. This officer may, if he thinks the enterprise safe, grant it permission to sell its stocks and bonds within the state, or else refuse the privilege. These laws, where constitutional, depend chiefly upon publicity for their effectiveness.

The Sucker List

In the get-rich-quick business, "the sucker list" plays a very important part. This list is made up of names of people who are known to bite at worthless truck. Such people are the "suckers." These "sucker" lists are graded. In one raid by the Government of the offices of one get-rich-quick concern, there was found a card index list of "suckers" marked according to their measures of credulity "good," "fair," and "worth trying."

Once a person writes for literature to any one of these harpies he is for years afterwards tagged as a "sucker." From then on he will be bombarded with all kinds of literature from all the get-rich-quick sharks, every one of whom is exceedingly anxious to make him wealthy without any effort on his part. His name is peddled from one to another. His name is bandied about or sold, as a large business is done among promoters with "sucker" lists, a name bringing all the way from one cent to one dollar, according to its possible value as a source of good plucking.

Scattering Risks

Hundreds of people are impoverished every year by get-rich-quick schemes. It is surprising to what an extent the mania for worthless stocks seizes some classes. I remember an instance where a western court was compelled to appoint a guardian for one man in order to keep intact the remainder of his fortune, which at one time was quite large, and save it from being entirely squandered on get-rich-quick stocks. This deluded individual had bought liberally of stocks in every fake to which his attention was called until he had thrown away nearly $300,000. When he was asked why he did it, he said he felt that

among the many stocks he had bought a number would prove very successful, so much so, that they would more than double what losses he had sustained in the worthless investments.

This is a theory obsessing a great many persons. They proceed on the belief that if one out of twenty stocks even partially realizes the profits claimed for all, they will be so rich that they can afford to lose on the other nineteen. The twentieth, the good thing, somehow never comes up to their measure.

It is true, of course, that large fortunes have been made from small investments in enterprises that once appeared highly speculative. Examples of such achievements are to be found in all lines of industry. Promoters can show how "$100 grows to $40,000" in the Ford Motor Company, how $1,500 invested in Bell Telephone Stock grew to nearly $2,000,000, or how the original Pullman Car Company stocks have increased a hundred fold in addition to liberal cash dividends that have been paid to the stockholders of this company. Investors should remember, on the other hand, that for each enterprise which survives many others fail. Those that succeed are actually based on real economic principles and backed by special ability and genius on the part of those that guide the affairs of the company. A rocky piece of land that contains no metal-bearing veins at all will never become a profitable producing gold mine, and the investor who takes his "chances" on it plays a losing game *every* time.

Common Sense

No investor need fall a prey to a dishonest or visionary promotion scheme if common sense is exercised. By inquiring into the character of the people promoting the

venture and by getting a financial statement, he will in a large measure protect himself. Even should he himself not feel competent to judge, an idea which in itself is suspicious, he should consult some reputable newspaper or banker. The latter would willingly advise him sincerely of his danger, if any existed. Ignorance alone is responsible for two-thirds of the money losses in investments. Ignorance cannot be protected unless it seeks the protection.

TEST QUESTIONS

1. What are the author's figures in regard to the annual losses which result from wild-cat schemes?
2. Explain some of the tricks used by get-rich-quick schemers to induce the public to invest in their enterprises.
3. What means are used by the government to check fraudulent financial schemes?
4. What is meant by a sucker list?
5. Why does scattering of investments in get-rich-quick stocks not insure a return?
6. What means has the average person of determining the investment value of a security?

CHAPTER XXIX

BUSINESS BAROMETERS

Their Function

After learning how to judge the value of every form of investment, a man may still be unsuccessful in the investment of money unless he acquires also a firm grasp upon the general principles which control the price movements of securities. In previous chapters a good deal has been said about general business conditions and their influence on the rise and fall of security prices. The careful investor must follow these business conditions in the same manner as the mariner uses the weather forecasts of the federal government.

Not so many years ago the proposal to have the government establish and maintain a bureau for the purpose of foretelling weather conditions was received with considerable ridicule. People think differently about it now; they have learned to use its forecasts. In the same manner intelligent business men use certain business signs to guide them in their business course. Certain phases of business have been so presented by the science of concentration and grouping that they may be read in the same manner as a barometer is read to forecast weather conditions.

Business barometers are most useful in foretelling the large swings in industry. The small daily fluctuations in

security prices which are caused by such factors as the personal composition of the stock market, time or cash transactions, amount of marginal trading, and the amount of manipulation, cannot of course be foretold with any degree of certainty. Only the primary movements are subject to such careful statistical analysis.

At least a dozen important factors which influence the movement of security prices may be mentioned. They are commodity prices, bank clearings, labor conditions, foreign trade, railroad business, iron and steel production, bank statements, building and real estate transactions, business failures, condition of crops, gold production, and finally social and political conditions.

Commodity Prices

The general trend of commodity prices is usually indicated by what are known as index-numbers. The leading index-number in this country is issued by Bradstreet; that of the London Economist is equally as famous. These index-numbers are a sort of composite picture of prices as a whole, and are found by reducing the prices of all the important commodities to a common denominator and then striking an average. When the price of commodities is high, more money is required to transact a given amount of business, and consequently, other things being equal, higher interest rates are likely to prevail. From the standpoint of economics capital is being absorbed. As a business man sees it, it means that more money is needed to do the same amount of business. Capital gets tied up, supply begins to run short, and consequently interest rates go up.

If the index-number is near its high record and still rising, the conservative business man will hesitate, however favorable other conditions may seem, to allow

himself to get into an extended condition. A new high record of the index number does not necessarily mean the approach of a panic, but it does serve as a warning.

Bank Clearings

Bank clearings are the record of the volume of bank checks presented at banks other than those upon which the checks are drawn. Since 95 per cent of the country's business is done in checks, it follows that such a record must be a close measure of the actual business transacted. So much is this true that some merchants compare their sales with the bank clearings in their locality in order to determine whether they are getting a fair share of business. Bank clearings show business conditions not only for the whole country, but for individual cities, states, and group of states. The importance of this territorial division of clearings is seen at once from the fact that a large increase in the clearings of New York City would probably simply indicate a great deal of speculation on the stock exchange.

Bank clearings are affected to no considerable extent by the level of commodity prices. It follows, therefore, that the same amount of bank clearings shown in two different years, does not necessarily indicate the same amount of business transacted. Allowance should also be made for increase in population and in capital investment within a given area. Bank clearings should, therefore, be adjusted to index-numbers, population, capital investments, etc.

Labor Conditions

The labor conditions of the country are usually determined by immigration statistics, unemployment figures, and strike conditions. The arrival of many immigrants

indicates surface conditions good and prices high. A low immigration figure and the return of many steerage passengers shows the reverse condition. Labor has become so mobile that the general business conditions of our country are reflected in the immigration statistics. Large unemployment figures, of course, show dull business conditions, and vice versa. A great strike involving the major plants in such an important line of industry as coal-mining or the steel business would tend to have a very disturbing effect upon business.

Foreign Trade

Foreign trade has an important bearing on prosperity and consequently on security prices. The margin of our foreign trade toward or away from a favorable balance of trade is a matter of some moment. National prosperity follows much the same rules that individual prosperity does.

About two weeks after the end of each month, export and import figures are sent out from Washington for the month. From them it is possible to keep close track of the trend of our foreign trade. These figures need to be read with care. A big excess of exports over imports does not necessarily mean satisfactory business conditions. The cause of the balance is of very great importance. Stationary exports and decreasing imports would give a balance in our favor, but would be anything but a favorable sign. Any conclusions about the balance of trade are valuable only after an examination as to the causes of the balance.

As a general rule, rising imports denote active trade and increased purchasing power. Such import statistics may, however, be artificially stimulated by rising commodity prices, in which case full allowance must be made

in the use of figures as a gage of real business conditions.

An increase in export business may be due to the simple fact that a great many manufacturers have been forced into a position of securing a foreign outlet to keep things moving or else of shutting down. The character of the exports should be noted. If the amount consists chiefly of food products, it may not necessarily indicate prosperous manufacturing and trading conditions in this country.

Railroad Earnings

Railroad reports have been standardized through the efforts of the Interstate Commerce Commission to such an extent that they reflect fairly accurately the trading conditions of the country. These reports give us records of freight handled from week to week, month to month, and year to year. The idle-car figures are significant for this same reason. In comparing railroad statistics with those of previous periods, great care should be exercised to determine whether the previous figures represent normal conditions or not.

Railroad earnings are somewhat late in reflecting business conditions. With most manufactured products a number of weeks or even months intervene between the time when the order is placed and the time when the goods are ready to be started on their way. It is perfectly possible for business to suffer a decided set-back and orders to fall off sharply while railroad earnings go on as though nothing had happened. However, by comparing the earnings from several months back, one is able to determine the large swings in business activity.

In using the earnings statement for comparison, allowance should be made for increased capitalization on a railroad. A corresponding increase should be shown in

the earnings to represent equal conditions. A per-mile basis of comparison is not satisfactory because the money may have been spent for rolling stock and improvement of the road bed.

Iron and Steel

The steel industry is the basic industry of the country and represents fairly well the business activity in all other industries. When the steel business is in good shape the general trade is usually active and vice versa. By tracing the monthly record of iron production and of orders placed for steel, one gets not only a faithful portrayal of conditions as they have been and are, but also a sound basis for deductions as to the future trend.

Bank Statements

Money is the basis of all trade and therefore perhaps the most sensitive factor in business barometers. In applying money conditions and prospects to the probable course of security movements we find many phenomena which are easily read and almost certain in their effects.

The general money condition of our country may be read pretty accurately in the statements made by the comptroller of the currency. These statements show the money in circulation, the bank loans, the cash held by the banks, the deposits of the banks, and the surplus reserves. The percentage of loans to deposits and the percentage of specie to loans are perhaps the two most important factors in these reports. If the percentage of loans to deposits is unduly high, the money situation is paralyzed. This condition may be offset by a correspondingly high percentage of specie to loans. On the other hand, if the percentage of loans to deposits does not appear unduly high, but the percentage of specie to loans

is very low, we may be in a dangerous position. It is when the two spread apart—when loans go up and specie falls—that the worst condition is indicated. The monetary and banking conditions abroad must always be taken into consideration, because of intimate international relations of banking.

The importance of bank statements upon the bearing of security prices is at once evident when we consider that security prices are determined primarily by two factors—the loaning rate of free capital and the general condition of business. A low rate of interest or the likelihood of low rates has the effect of stimulating security prices, because banks and other money-lending institutions are forced into the investment market when they cannot loan money to advantage. Conversely a high rate of interest or the prospect of high rates has the effect of depressing prices, because banking institutions sell their securities in order to lend the money so released. When, therefore, money rates are low, securities tend to advance, and when rates are high, they tend to decline.

These forces may, however, be offset by the general business conditions. Good business conditions or the promise of good business conditions tend to advance security prices because they promise larger earnings and a stronger financial situation. Poor business conditions or an unpromising outlook give the reverse effect. The larger movements of security prices are always the resultant of the interaction of these two forces. When they work together the effect is irresistible.

When they do not work together the antagonism between the two forces may produce movements in different directions in different classes of securities. Let us take a simple example. If interest rates are low and business conditions bad, with prospect of still lower inter-

est rates and still poorer business conditions, high-grade bonds such as choice municipals whose safety cannot be impaired by any extent of depression in business will advance because their market price is influenced wholly by money rates. Middle-grade bonds such as second class railroad issues will remain almost stationary, low money rates tending to advance their price and the fear of decreased earnings tending to depress them. The lowest grade of bonds and stocks whose margin of security even in good times is low, will probably suffer in price because the fear of defaulting interest and of reduction in dividends will act much more strongly than the mere stimulus of low interest rates.

Because of these price tendencies bank statements furnish a very valuable barometer guide to the intelligent business man. They show whether the credit condition of a state is so strained that liquidation is bound to take place or whether the banks are in a position to finance another upward movement in trade, especially if the international factor is properly considered in the calculations.

Building and Real Estate

Building and real estate activities are a fairly good index of the business conditions of a locality and of the country as a whole. Increased building operations in a city, which have not been stimulated as a result of a boom or to replace extraordinary fire losses, indicate prosperous business conditions. Increased activity in railroad building and supplies for railroads generally show prosperous conditions throughout the country. A great many of these tendencies are reflected in iron and steel statistics. The building statistics are, therefore, simply another method of reading the country's business conditions.

Business Failures

The number of business failures, together with the amount involved in the failures, indicates fairly accurately the business and money conditions of a country. A great many failures need not be discouraging to the investor. They may simply indicate that the top of a period of liquidation has been reached, On the other hand, too few failures may foretell disaster. In considering business failures as a guide such unnatural influences as the earthquake at San Francisco should be properly weighed in reading the figures.

Crops

The products of the soil are among the most important of our fundamental factors in forecasting business conditions, for upon our ability to produce commodities for our own uses and to sell for export, money conditions, foreign trade balances, and other factors are largely dependent. The agricultural products which depend so largely upon climatic conditions are the most important factors in this connection. It is said that James J. Hill uses crop reports very extensively in determining upon his business ventures.

The most important crop reports are the monthly crop reports of the United States Government. Private institutions, such as banks and trade papers, frequently issue crop reports based either upon the government reports or upon their own investigations. These reports usually show the acreage of each class of products and the percentage standing of the crop at the given time. By means of these reports it is usually possible to tell in advance approximately what the wheat crop or the cotton crop of the country is going to be. These figures must, of

course, be discounted by the crop conditions of similar products in foreign countries, when determining their influence upon security prices.

Gold Production

Throughout this book emphasis has been laid upon the influence of gold production upon commodity prices. From present indications no abnormally large increase in the annual production of gold is to be expected, and consequently the production of gold should not cause sudden fluctuation in the value of securities. However, should new discoveries be made, the intelligent investor will at once weigh the possible effects of such a discovery upon the trend of security prices.

Social and Political Conditions

Social and political conditions become very tangible factors in the general trend of security prices. War clouds at once affect prices. The pending or the enactment of a certain piece of legislation may have a wholesome or a depressing effect. A favorable court decision may advance affected stocks several points. A change in tariff policy always calls for some economic adjustment and therefore affects certain securities directly. With respect to all these movements the psychological factor has an important influence upon the trend of prices. A condition of fear and distrust decreases prices, while one of hope increases business activity and prices accordingly. When capital is timid the same effect is produced as when there is a great curtailment of capital. Even the uncertainties connected with elections are reflected in the trend which security prices follow.

A careful study of the foregoing factors will enable the

intelligent observer to read the financial skies. He will not, of course, be infallible in his conclusions, but he will be given a degree of assurance sufficient to make them well worth while. In all cases the business man should bear in mind that any one of these factors observed alone is an uncertain guide, but when due allowance is made for the interaction of all of these forces, then business barometers become valuable steering charts in business affairs.

TEST QUESTIONS

1. What is the meaning of business barometers?
2. Name at least a dozen factors that may serve as valuable indexes to business conditions.
3. How does the course of commodity prices influence business conditions?
4. Explain in what way bank clearings are a guide to the business situation.
5. What do foreign trade statistics show with reference to business tendencies?
6. What precautions should be used in interpreting railroad statistics?
7. What is the relation of loans, deposits, and specie of banks to the general business situation?
8. Show how a business man may better adjust his credit relations by an understanding of banking conditions.
9. What do building statistics show in regard to the industrial situation at a given time?
10. What effect does the amount of gold production have upon the trend of security prices?

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